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Thomas H. Tomlin Wicomico Church, VA 22579 District IV



Northumberland County, Virginia

Board of Supervisors

P.O. Box 129 • 72 Monument Place Heathsville, Virginia 22473

April 23, 2009

Denise M. Mosca
Environmental Specialist II
Department of Environment Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060

RE: VPDES Permit Reissuance VA0091421
Callao Wastewater Treatment Facility - Northumberland County

Dear Ms. Mosca:

This letter is written in response to the additional information needed to complete the application. I apologize in the delay of the information. Please see enclosed sheet that includes A.12 chart. Also, enclosed is a schematic showing UV filteration. Please replace the diagram previously sent with this one.

Please let us know if you have any further questions.

Sincerely,

Kenneth D. Eades

Enclosure

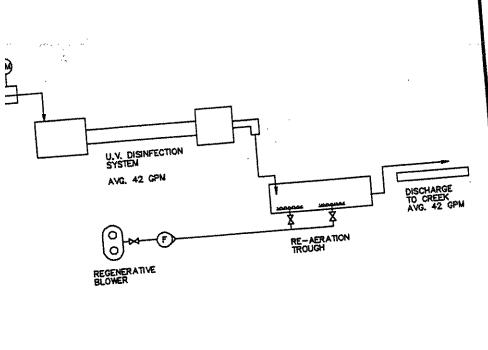
COUNTY ADMINISTRATOR

Kenneth D. Eades Heathsville, VA 22473 804-580-7666 (Voice) 804-580-7053 (Fax) keades@co.northumberland.va.us

COUNTY ATTORNEY

W. Leslie Kilduff, Jr. 804-435-0851 (Voice) 804-435-0551 (Fax)

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A.11. Description of	of Treatmer	ıt.				****	····	······································		····	
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ļ. ————	Advanced	i			Other	. Describ	e: + <u>Disinf</u>	ection ·	f		
b. Indicate th	e following i	removal r	ates (as applicabl	e):						
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Other								90	···	%	
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				hlorination u	sed fo	r this outfa	II?	***************************************	Yes	_1	No No
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DENTIFICATION

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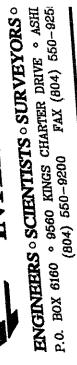
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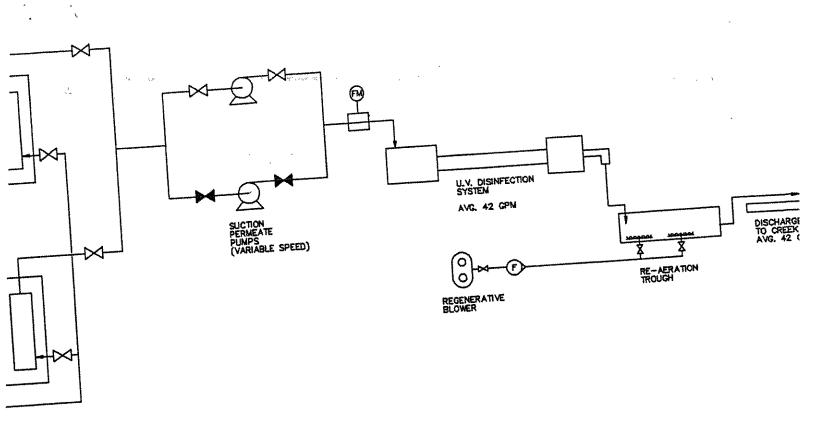
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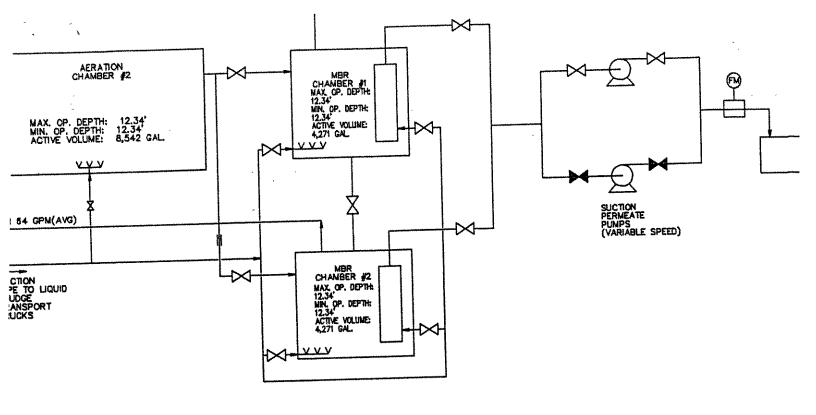
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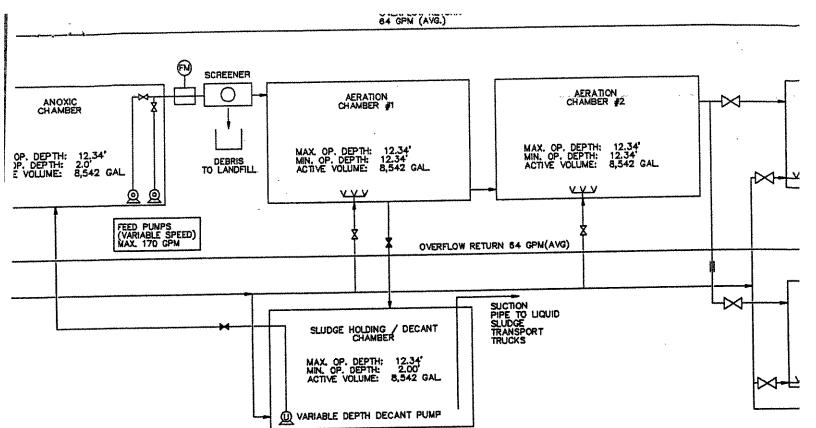


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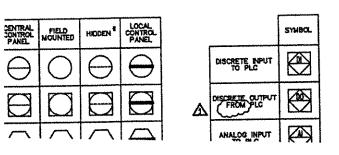


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+	USER'S CHOICE			-	Pat	CALI	FC	EIC	ERC	N/A	1

Mosca, Denise

From:

Northumberland - Kenneth Eades

Sent:

Wednesday, April 22, 2009 9:53 AM

To:

Mosca, Denise

_ . . .

Subject: Re: Callao VPDES Application

Denise,

Thanks we will take care it.

Kenny

Mosca, Denise wrote:

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<!--[if mso 9]--> <!--[endif]-->
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Hi, I never got the revised form 2A that I needed that I noted in my letter. Additionally, the treatment plant schematic says chlorination is used instead of UV disinfection. Could you make that change and get it and the corrected Form 2A to me ASAP?

Thanks,

Denise

Denise Mosca

Environmental Specialist II

DEQ-Piedmont Regional Office

4949-A Cox Road,

Glen Allen, Va. 23060

(804) 527-5027

fax (804) 527-5106

Kenneth D. Eades Northumberland County County Administrator P.O. Box 129 Heathsville, VA 22473 (804) 580-7666 (804) 580-7053 Fax



Callas Application not complete yet

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY PIEDMONT REGIONAL OFFICE

4949-A Cox Road, Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106 www.deq.virginia.gov

David K. Paylor Director

March 19, 2009

Mr. K. D. Eades Northumberland County Administrator P.O. Box 129 Heathsville, Virginia 23060

RE: VPDES Permit Reissuance VA0091421
Callao Wastewater Treatment Facility - Northumberland County

Dear Mr. Eades:

Preston Bryant

Secretary of Natural Resources

Your application and laboratory work to complete the water quality standards work has been reviewed. We need additional information in order to process your application.

Water Quality Monitoring Form

1. Sample results were received from the laboratory and will have to be filled out on the Water Quality Monitoring Form. However, please note that the following parameters did not seem to be included: Alpha – Endosulfan, Beta – Endosulfan, Endosulfan Sulfate, Endrin, Hexachlorocyclohexane Gamma – BHC (Lindane). Dichloromethane. These sample results were not previously analyzed at the appropriate QL and will have to be submitted at the specified QL: If you also sample for "Hardness," it may help us give you more credit so that limits need not be so stringent. I am attaching another Water Quality Monitoring Form. Please also include the Certificate of Analysis that shows the above parameters analyzed at the correct QL.

Form 2A—Information to complete the forms were submitted, but the revised forms were not. Please revise the forms and resubmit them with the updated information.

- Page 5 of 21, Part A.9.b. Thank you for the screen print about the latitude/longitude; I
 will discuss this with our planning section.
- 2. Page 6 of 21, Part A.12. Thank you for the lab certificates for the data that were compiled. Please complete the "number of samples" column on top, under the column heading Average Daily Value. Since the number of lab certificates provided were 4 from January 2009 in addition to those from 15 Sept. and 2 Sept. 2008, that would make 6 24-hr. composite samples instead of the 3 that were previously noted for CBOD5 and TSS. The lab certificate showed that the samples were analyzed for CBOD5 and not BOD5, so the values for the BOD5 line must be removed.

04/

Please address these comments by April 2, 2009 in order to complete your application so that a draft permit may be written to move the permit process along. If you have any questions about this letter, please contact me at 804-527-5027 or dmmosca@deq.virginia.gov.

Sincerely,

Denise M. Mosca Environmental Specialist II

Mosca, Denise

From: Palmore, Jennifer

Sent: Friday, March 27, 2009 11:13 AM

To: Mosca, Denise

Subject: Lat-long

You sent me the DEQ lat-long, and their map, but not the lat-long that they submitted. Could you please send that? The map is very, very close to what I have had for them. The lat-long in CEDS is pretty far off and I am not sure where that came from. Based on the map it is approximately 37 58 21, -76 33 27, but would like to see what they had if you could. Thanks.

Thanks.

Jennifer V. Palmore, P.G. Senior Environmental Engineer Dept. of Environmental Quality Piedmont Regional Office 1949-A Cox Road Glen Alien, VA 23060 (804) 527-5058 (804) 527-5106 (fax)

Mosca, Denise

From:

David Stoneman [primarylabs@erols.com] Tuesday, March 24, 2009 12:42 PM Mosca,Denise Callao-Hardness

Sent:

To: Subject:

Attachments:

03-24-2009 12;40;33PM.pdf



Please find the result for Hardness. David.

Primary Laboratories, Inc. Results

24-Mar-09

Date Sampled:

15-Jan-09

Work Order No:

0901117-01

Client ID:

Final Effluent Grab

I IIIai Liiiuciii	GIAD				
Final	Reporting	Units of	Method	Date	Tech.
Result	Limit	Measure	Numbers*	Analyzed	Initials
41.50	0.01	mg/L	4500CL B	21-Jan-09	NA
<0.01	0.01	mg/L	4500CN E	16-Jan-09	AS
<0.05	0.05	mg/L	376.1	23-Jan-09	HV
65.6	0.1	mg/L @ CaCOo	2340 C	24-Mar-09	NA
	Final Result 41.50 <0.01 <0.05	Result Limit 41.50 0.01 <0.01	Final Result Reporting Limit Units of Measure 41.50 0.01 mg/L <0.01	Final Result Reporting Limit Units of Measure Method Numbers* 41.50 0.01 mg/L 4500CL B <0.01	Final Result Reporting Limit Units of Measure Method Numbers* Date Analyzed 41.50 0.01 mg/L 4500CL B 21-Jan-09 <0.01

Method Numbers*:

EPA 625

Date Analyzed:

22-Jan-09

Technician:

HV

Units of Measure:

ug/L

Date Sampled:

15-Jan-09

Work Order No:

0901117-01

Client ID:

Final Effluent Grab

Onom 10.	I mai Linucia Giab						
Test	Final	Detection					
Description	Result	Limit					
Acid Extractables							
2-Chlorophenol	<5	5					
2,4-Dichlorophenol	<5	5					
2,4-Dimethylphenol	<5	5					
2,4-Dinitrophenol	<5	5					
2-Methyl-4,6-Dinitrophenol	<5	5					
Pentachlorophenol	<5	5					
Phenol	<5	5					
2,4,6-Trichlorophenol	<5	5					

RE Callao Permit Results

From: David Stoneman [primarylabs@erols.com]

Sent: Monday, March 23, 2009 10:07 AM

To: Mosca, Denise

Subject: RE: Callao Permit Results

Attachments: 0901117-COA.pdf

Pleasae find Cert of Analysis attached. David.

----Original Message----

From: Mosca,Denise [mailto:dmmosca@deq.virginia.gov]

Sent: Monday, March 23, 2009 9:49 AM

To: David Stoneman

Subject: RE: Callao Permit Results

Thanks for sending the Water Quality results form, could you also send the lab certification showing these results? Denise

Denise Mosca Environmental Specialist II DEQ-Piedmont Regional Office 4949-A Cox Road, Glen Allen, Va. 23060 (804) 527-5027 fax (804) 527-5106

----Original Message----

From: David Stoneman [mailto:primarylabs@erols.com]

Sent: Monday, March 23, 2009 9:11 AM

To: Mosca Denise

Subject: Callao Permit Results

Please find attached. 5 pages.

No virus found in this incoming message.

Checked by AVG - www.avg.com

Version: 8.0.238 / Virus Database: 270.11.24/2017 - Release Date: 03/23/09 06:52:00

7423 Lee Davis Road, Mechanicsville, VA 23111 . Telephone (804) 559-9004 . Fax (804) 559-9306

ANALYTICAL LABORATORY REPORT

20-Mar-09

Callao Treatment Plant Attn: Lee Bowles 104 Harryhogan Road Callao, VA 22435

Date Received:

15-Jan-09

Date Sampled: Work Order No:

15-Jan-09 0901117-01

Client ID:

Final Effluent Grab

Client ID:	Final Effluent	Grab				
Test	Final	Reporting	Units of	Method	Date	Tech.
Description	Result	Lìmit	Measure	Numbers*	Analyzed	Initials
Dissolved Metals Antimony	<0.2	0.2	ug/L	EPA 200.2/3120B	26- F eb-09	HV
Arsenic	<50.0	50.0	ug/L	EPA 200.2/3120B	16-Jan-09	HV
Cadmium	<0.3	0.3	ug/L	EPA 200.2/3120B	27-Feb-09	HV
Chromium	<0.5	0.5	ug/L	EPA 200.2/3120B	27-Feb-09	HV
Copper	<0.5	0.5	ug/L	EPA 200.2/3120B	27-Feb-09	HV
Lead	<0.5	0.5	ug/L	EPA 200.2/3120B	3-Mar-09	HV
Mercury	<0.2	0.2	ug/L	3112B	22-Jan-09	HV
Nickel	<0.5	0.5	ug/L	EPA 200.2/3120B	26-Feb-09	HV
Selenium	<2.0	2.0	ug/L	EPA 200.2/3120B	26-Feb-09	HV
Silver	<0.2	0.2	ug/L	EPA 200.2/3120B	27-Feb-09	HV
Thallium	<2.0	2.0	ug/L	EPA 200.2/3113B	21-Jan-09	HV
Zinc	42.0	10.0	ug/L	EPA 200.2/3120B	16-Jan-09	HV
			Validativi vivini			
Chromium VI	<0.5	0.5	ug/L	3500	15-Jan-09	NA

Primary Laboratories, Inc. Results

20-Mar-09

Date Sampled: Work Order No:

15-Jan-09 0901117-01

Client ID:

Final Effluent Grab

Client ID:	Final Effluent					
Test	Final	Reporting	Units of	Method	Date	Tech.
Description	Result	Limit	Measure	Numbers*	Analyzed	Initials
Pesticides						
Aldrin	<0.05	0.05	ug/L	EPA 608	22-Jan-09	HV
Chlordane	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
4,4-DDD	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
4,4-DDE	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
4,4-DDT	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Dieldrin	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Endosulfan (alpha)	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Endosulfan (beta)	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Endosulfan sulfate	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Endrin	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Endrin Aldehyde	<0.50	0.50	ug/L	EPA 608	22-Jan-09	HV
Heptachlor	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Heptachlor Epoxide	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Alpha-BHC	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Beta-BHC	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Gamma-BHC (Lindane)	<0.05	0.05	ug/L	EPA 608	22-Jan-09	HV
Kepone	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Methoxychlor	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Mirex	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV⊹
PCB-1260	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
PCB-1254	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
PCB-1248	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
PCB-1242	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
PCB-1232	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
PCB-1221	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
PCB-1016	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
PCB Total	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
Toxaphene	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV

Primary Laboratories, Inc. Results

20-Mar-09

Method Numbers*:

EPA 625

Date Analyzed:

22-Jan-09

Technician:

HV

Units of Measure:

Date Sampled:

ug/L

Work Order No:

15-Jan-09 0901117-01

Client ID:	Final Effluent Grab						
Test	Final	Detection					
Description	Result	Limit					
Semi-Volatiles							
Acenaphthene	<5	5					
Anthracene	<5	5					
Benzidine	<5	5					
Benzo(a) anthracene	<5	5					
Benzo(b) fluoranthene	<5	5					
Benzo(k) fluoranthene	<5	5					
Benzo(a)pyrene	<5	5					
bis-(2-Chloroethyl)ether	<5	5					
bis-(2-Chloroisopropyl)ether	<5	5					
Butyl benzyl phthalate	<5	5					
2-Chloronaphthalene	<5	5					
Chrysene	<5	5					
Dibenzo(a,h)anthracene	<5	5					
Dibutyl phthalate	<5	5					
3,3-Dichlorobenzidine	<5	5					
Diethyl phthalate	<5	5					
Di-2-ethylhexyl Phthalate	<5	5					
Dimethyl phthalate	<5	5					
2,4-Dinitrotoluene	<5	5					
1,2-Diphenylhydrazine	<5	5					
Fluoranthene	<5	5					
Fluorene	<5	5					
Hexachlorobenzene	<5	5					
Hexachlorobutadiene	<5	5					
Hexachlorocyclopentadiene	<5	5					
Hexachloroethane	<5	5					
Indeno(1,2,3-cd) pyrene	<5	5					
Isophorone	<5	5					
Nitrobenzene	<5	5					
N-Nitrosodimethylamine	<5	5					
N-Nitrosodiphenylamine	<5	5					
N-Nitrosodi-n-propylamine	<5	5					
Pyrene	<5	5					
1,2,4-Trichlorobenzene	<5	5					

Primary Laboratories, Inc. Results

20-Mar-09

Method Numbers*:

EPA 624

Date Analyzed:

21-Jan-09

Technician:

PΒ

Units of Measure: Date Sampled:

ug/L

Work Order No:

15-Jan-09 0901117-01

Client ID:	Final Effluent Grab						
Test	Final	Detection					
Description	Result	Limit					
Acrolein	<5	5					
Acrylonitrile	<5	5					
Benzene	<5	5					
Bromoform	<5	5					
Carbon tetrachloride	<5	5					
Chlorobenzene	<5	5					
Chlorodibromomethane	<5	5					
Chloroform	<5	5					
1,2-Dichlorobenzene	<5	5					
1,3-Dichlorobenzene	<5	5					
1,4-Dichlorobenzene	<5	5					
Dichlorobromomethane	<5	5					
1,2-Dichloroethane	< 5 .	5					
1,1-Dichloroethylene	<5	5					
trans-1,2-Dichloro-ethylene	<5	5					
1,2-Dichloropropane	<5	5					
1,3-Dichloropropene	<5	5					
Ethylbenzene	<5	5					
Methyl Bromide	<5	5					
Methylene Chloride	<5	5					
1,1,2,2-Tetrachloro-ehtane	<5	5					
Tetrachloroethylene	<5	5					
Toluene	<5	5					
1,1,2-Trichloroethane	<5	5					
Trichloroethylene	<5	5					
Vinyl Chloride	<5	5					
1							

Primary Laboratories, Inc. Results

20-Mar-09

Date Sampled:

15-Jan-09

Work Order No: Client ID: 0901117-01
Final Effluent Grab

CHIGHTID.	I HIGH MINGS	Ciub				
Test	Final	Reporting	Units of	Method	Date	Tech.
Description	Result	Limit	Measure	Numbers*	Analyzed	Initials
Chlorides	41.50	0.01	mg/L	4500CL B	21-Jan-09	NA
Cyanide	<0.01	0.01	mg/L	4500CN E	16-Jan-09	AS
Hydrogen Sulfide	<0.05	0.05	mg/L	376.1	23-Jan-09	HV

Method Numbers*:

EPA 625

Date Analyzed:

22-Jan-09

Technician:

HV

Units of Measure:

ug/L

Date Sampled:

15-Jan-09

Work Order No:

0901117-01

Client ID:

Final Effluent Grab

Client ID:	Final Effluent Grab						
Test	Final	Detection					
Description	Result	Limit					
Acid Extractables							
2-Chlorophenol	<5	5					
2,4-Dichlorophenol	<5	5					
2,4-Dimethylphenol	<5	5					
2,4-Dinitrophenol	<5	5					
2-Methyl-4,6-Dinitrophenol	<5	5					
Pentachlorophenol	<5	5					
Phenol	<5	5					
2,4,6-Trichlorophenol	<5	5					

Primary Laboratories, Inc. Results

20-Mar-09

Date Sampled: Work Order No:

15-Jan-09 0901117-01

Client ID:

Final Effluent Grab

i iliai Liliacii	COIGO				
Final	Reporting	Units of	Method	Date	Tech.
Result	Limit	Measure	Numbers*	Analyzed	Initials
<0.2	0.2	ug/L	622	11-Feb-09	SC**
<1	1	ug/L	622	11-Feb-09	SC**
<1	1	ug/L	622	11-Feb-09	SC**
<1	1	ug/L	622	11-Feb-09	SC**
<1	1	ug/L	622	11-Feb-09	SC**
38	30	ng/L	GC/FPD	3-Feb-09	SC*
	Final Result <0.2 <1 <1 <1 <1 <1	Result Limit	Final Reporting Units of Measure <0.2 0.2 ug/L <1 1 ug/L <1 ug/L <1 1 ug/L <1 ug/L	Final Result Reporting Limit Units of Measure Method Numbers* <0.2	Final Result Reporting Limit Units of Measure Method Numbers* Date Analyzed <0.2

Date Sampled:

15-Jan-09

Work Order No:

0901117-01

Client ID:

Final Effluent Grab

CHOIL ID.	i ma minacin				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Test	Final	Reporting	Units of	Method	Date	Tech.
Description	Result	Limit	Measure	Numbers*	Analyzed	Initials
Gross Alpha Particle	2.2 +/- 0.8	1.0	pCi/l	EPA 900.0	22-Jan-09	SC**
Beta & Photon Activity	33 +/- 1	1.4	pCi/l	EPA 900.0	22-Jan-09	SC**
Strontium-90	1.4 +/- 0.6	1.0	pCi/l	EPA 905.8	2-Feb-09	SC**
Tritium	55.7 +/- 83.9	135.3	pCi/l	EPA 906.0	4-Mar-09	SC**
	1		1		1	l

^{**} Analysis sub-contracted.

sgnature: 5000

Parry L. Bragg Laboratory Manager Date: 3--20-09

These analytical results are based upon materials provided by the client and are intended for the exclusive use of the client. These analytical results represent the best judgement of Primary Laboratories, Inc. Primary Laboratories, Inc. assumes no responsibility, express or implied, as to the interpretation of the analytical results contained in this report. This report is not to be reproduced except with the written approval of Primary Laboratories, Inc.

^{*}All methods are from Standard Methods 18th Edition, unless otherwise noted.

Callao Permit Results 5 pages From: David Stoneman [primarylabs@erols.com] Sent: Monday, March 23, 2009 9:11 AM To: Mosca,Denise Subject: Callao Permit Results

Attachments: Callao-1.pdf; Callao-2.pdf; Callao-3.pdf; Callao-4.pdf; Callao-5.pdf

Please find attached. 5 pages.

Page 1 of 6

DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY MONITORING

OUTFALL NO. 001

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ^{IS}	SAMPLE FREQUENCY
	D	ISSOLVED	METALS	4914		4 800
7440-36-0	Antimony	(4)	0.2	40.2	G	1/5 YR
7440-38-2	Arsenic	(4)	(6)	450	G	1/5 YR
7440-43-8	Cadmium	(4)	0.3	<0.3	G	1/5 YR
15065-83-1	Chromium III	(4)	0.5	40.5	G	1/5 YR
18540-29-9	Chromium VI	(4)	0.5	20.5	G	1/5 YR
7440-50-8	Copper	(4)	0.5	40.5	G	1/5 YR
7439-92-1	Lead	(4)	0.5	40.5	G	1/5 YR
7439-97-6	Mercury	(4)	1.0	L 0.2	G	1/5 YR
7440-02-0	Nickel	(4)	0.5	20.5	G	1/5 YR
7782-49-2	Salenium	(4)	2.0	2.0	G	1/5 YR
7440-22-4	Silver	(4)	0.2	20.2	G	1/5 YR
7440-28-0	Thallium	(5)	(6)	< 2	G	1/5 YR
7440-66-6	Zinc	(4)	2.0	42	G	1/5 YR
,	200	ESTICIDE	S/PCB'S			
309-00-2	Aldrin	808	0.05	20.05	G or C	1/5 YR
57-74-9	Chlordene	608	0.2	< 0.1	GorC	1/5 YR
2921-88-2	Chlorpyrifos (Dursban)	622	(6)	2.02	GorC	1/5 YR
72-54-8	DOD	608	0.1	20 i	GerC	1/5 YR
72-55-9	ODE	608	0.1	20.1	GorC	1/5 YR
50-29-3	DOT	808	0.1	20.1	GarC	1/5 YR
8065-48-3	Demeton	(5)	(6)	41	GorC	1/5 YR
60-57-1	Dieldrin	608	0.1	20. j	G or C	1/5 YR
959-98-8	Alpha-Endosuifari	608	0.1	40.1	G or C	1/5 YR
33213-65-9	Beta-Endosulfan	608	0.1	101	G or C	1/6 YR
1031-07-8	Endosulfan Sulfate	608	0.1	46.1	GorC	1/6 YR
72-20-8	Endrin	608	0.1	4 0.1	GorC	1/5 YR
7421-93-4	Endrin Aldehyde	(5)	(6)	40.5	G or C	1/5 YR

Page 2 of 6

DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY MONITORING

49 1

0.1004	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽³⁾	SAMPLE FREQUENCY ⁰
68-50-0	Guthion	622	(6)	41	GorG	1/5 YR
78-44-8	Haptachior	608	0.5	40.	G or C	1/5 YR
1024-57-3	Heptachior Epoxide	(5)	(6)	<0.1	G or C	1/5 YR
319-84-6	Hexachlorocyclohexane	608	(6)	ZC,	GorC	1/5 YR
	Alpha-BHC Hexachlorocyclohexana	608	(6)	20.1	Gorc	1/6 YR
319-85-7	Beta-BHC Hexachiorocyclohexane	608	0.05	40.05	GorC	1/5 YR
58-89-9	Gamma-BHC or Lindane		(6)	40.1	GorC	1/5 YR
143-50-0	Kapona	(10)		 	G or C	1/5 YR
121-75-5	Melechion	(5)	(6)	41		
72-43-5	Methoxychlor	(5)	(8)	40.	GorC	1/5 YR
2385-85-5	Mirex	(5)	(6)	40.1	GorC	1/5 YR
56-38-2	Parathion	(5)	(8)	41	GorC	1/5 YR
11096-82-5	PC8 1260	608	1.0	40.2	G or C	1/5 YR
11097-69-1	PCB 1254	608	1.0	402	GorC	1/5 YR
12672-29-6	PCB 1248	608	1.0	202	GorC	1/5 YR
53489-21-9	PCB 1242	608	1.0	60.2	G or C	1/5 YR
11141-16-5	PCB 1232	608	1.0	40.2	GorC	1/5 YR
11104-28-2	PC8 1221	60B	1.0	40.2	GorC	1/5 YR
12674-11-2	PCB 1016	608	1.0	40.2	G or C	1/5 YR
1336-36-3	PCB Total	808	7.0	60.2	GorC	1/5 YR
8001-35-2	Toxaphere	808	50	40.1	GorC	1/5 YR
60-10-5	Tributyitin	(8)	(6)	,038	GorC	1/5 YR
	BASE N	EUTRAL	EXTRACTA	BLES		
83-32-9	Acenaphthene	625	10.0	45	GorC	1/5 YR
120-12-7	Anthracene	625	10.0	45	G or C	1/5 YR
92-87-5	Benzidine	(5)	(6)	45	GorC	1/5 YR
56-55-3	Benzo (a) anthracene	625	10.0	25	GorC	1/5 YR
205-99-2	Benzo (b) fluorenthene	625	10,0	25	GorC	1/5 YR
207-08-9	Benzo (k) flugranthene	625	10.0	45	GorC	1/5 YR
50-32-8	Benzo (a) pyrene	625	10.0	45	GorC	1/5 YR

Page 4 of 6

DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY MONITORING

49/1

OUTFALL NO. 001 SAMPLE TYPE(3) QUANTIFICATION LEVEL⁽¹⁾ REPORTING SAMPLE EPA ANALYSIS FREQUENCY(*) NO. RESULTS CHEMICAL CASRNE 1/5 YR GorC 10.0 45 Pyrene 129-00-0 1/5 YR 625 10.0 G or C 1,2,4-Trichlorobenzene 120-82-1 **VOLATILES** (6) 45 G 1/6 YR (5) 107-02-8 Acrolein (8) 45 G 1/5 YR (5) 107-13-1 **Acrylonitrile** 10.0 Z 5 G 1/5 YR 524 71-43-2 Benzene 10.0 G 1/5 YR 624 75-25-2 Bromoform 45 G 1/5 YR 824 10,0 Carbon Tetrachloride 56-23-5 Chiorobenzene G 1/5 YR 50.0 108-90-7 824 (synonym = monochlorobenzene) 10.0 45 G 1/5 YR 624 124-48-1 Chlorodibromomethane 10.0 G 1/5 YR 624 87-86-3 Chigraform 1/5 YR 624 20.0 G METHYLENE CHORIDE 75-09-2 1/5 YR Ġ 75-27-4 624 10.0 45 Dichlarabromomethane 1/5 YR 624 10.0 G 107-06-2 1,2-Dichloroethane .4.5. 1/5 YR 15 G 624 10.0 75-35-4 1,1-Dichloroethylene 45 G 1/5 YR 1,2-trans-dichloroethylene (5) (6) 156-60-5 1/5 YR 45 G (5) (8) 78-87-5 1,2-Dichloropropane 45 G 1/5 YR (5)(6) 542-75-8 1,3-Dichioropropene 45 1/5 YR 10.0 G 624 100-41-4 Ethylbenzene 1/6 YR 45 Œ (8) **Methyl Bromide** (5) 74-83-9 45 Œ 1/5 YR (5) (8) 1,1,2,2-Tetrachioroethane 79-34-5 1/5 YR 624 10.0 G Tetrachloroethylene ساس 127-18-4 1/5 YR 624 10.0 G 10-88-3 Toluene G 1/5 YR (5) 1,1,2-Trichioroethane (6)79-00-5 1/5 YR G 10.0 Trichlomethylene 824 45 79-01-6 1/5 YR 45 G 624 10.0 75-01-4 Vinyl Chlorida

Page 5 of 6

DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY MONITORING

CASONE	CHEMICAL	EPA ANALYSIS	QUANTIFICATION LEVEL"	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	BAMPLE FREQUENCY ⁽²⁾
CASRN#	C. D. Sandaler	RADIONU	CLIDES	Pc	1/4-5	
	Strontium 90 (pCI/L)	(5)	(6)	1,450.6	∫ G or C	1/5 YR
	Trittum (pCi/L)	(5)	(6) 55	7 ± 83.9 ×	Gorc	1/5 YR
	Beta Particle & Photon Activity (mrem/yr)	(5)	(8)	33±1 v	Gorc	1/5 YR
	Gross Alpha Particle Activity (pCi/L)	(5)	(6)	2.2508	Gorc	1/5 YR
	A	CID EXTRA	CTABLES	49/4		
95-57-8	2-Chiorophenol	625	10.0	25	Gorc	1/5 YR
120-83-2	2,4 Dichlorophenoi	625	10.0	<u>-5</u>	Gac	1/5 YR
105-67-9	2,4 Dimethylphanol	625	10.0	45	GorC	1/5 YR
51-28-6	2,4-Dinitrophenol	(5)	(6)	45	G or C	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol	(5)	(6)	45	GorC	1/5 YR
87-86-5	Pentechlorophenol	625	50.0	45	GorC	1/5 YR
108-95-2	Phenol ⁽⁷⁾	825	10.0	45	GorC	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0	25	GorC	1/5 YR
eris a		MISCELLA	NEOUS		4.1/2	
16887-00-6	Chlorides	(5)	(6)	41,5 49	L	1/5 YR
57-12-5	Cyanide, Total	335.2	10,0	40.01 €	G	1/5 YR
7783-06-4	Hydrogen Sulfide	(5)	(6)	LC051	c	1/5 YR

Name of Principal Exec. Officer or Authorized Agent/Title

Signature of Principal Officer or Authorized Agent/Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

SUPERVISORS

Ronald L. Jett, Chairman Heathsville, VA 22473 Distruct V

Richard F. Hayme, Vice-Chairman Heathsville, VA 22473 Dispret II

A. Joseph Self, Sr. Callao, VA 20435 District I

Jantes M. Long Wicomico Church, VA 22579 District (if

Thomas H. Tomlin Wicomico Climch, VA 22579 District IV

February 23, 2009

Denise Mosca **Environmental Specialist II DEQ-Piedmont Regional Office** 4949-A Cox Road Glen Allen, Virginia 23060

RE: VPDES Permit Reissuance VA0091421-Callao Wastewater Treatment Facility - Northumberland County

Dear Ms. Mosca:

This letter is to address the letter concerning the Callao Wastewater Treatment facility.

1) The Water Monitoring Form, please see attached letter from our lab Primary Laboratories, Inc. for their explanation. We will keep in contact with them to assure that you get the correct information in a timely manner.

Form 2A

Sincerely

- 1. Page 5 of 21, Part A.9.b. The latitude/longitude that is provided to you is the exact location according to our GIS program. We are unaware of the location you have on file because the latitude and longitude that was submitted in the original application differs from the one you have. We went back after this was questioned and got the exact location and have enclosed the screen shot for your records.
- 2. Page 6 of 21, Part A.12. Previously two tests were sent. Enclosed you will find the Analytical Laboratory Report from January 2009 to go with the 4 month difference from the September 2008 testing. Please accept the report as the analysis.

Please feel free to contact me if you need any further information. We appreciate your patience with this and hope that we can proceed.

Northumberland County, Virginia

Board of Supervisors

P.O. Box 129 • 72 Monument Place Heathsville, Virginia 22473

RECEIVED FEB 272009

COUNTY ATTORNEY

Kenneth D. Eades Heathsville, VA 22473

804-580-7666 (Voice)

804-580-7053 Fax)

COUNTY ADMINISTRATOR

keades@co.northumberland.va us

W. Leslie Kilduff, Jr. 804-435-0851 (Voice) 804-435-0551 (Fax)

Kenneth D. Eades County Administrator



7423 Lee Davis Road • Mechanicsville, VA 23111 • Telephone (804) 559-9004 • Fax (804) 559-9306

February 25, 2009

Dana Wilson Northumberland Co. P.O. Box 129 Heathsville, VA 22473

Dear Ms. Wilson,

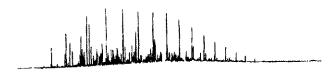
I am in receipt of the letter from DEQ dated 2/10/09 listing items missing or reported above QL's. We have sufficient sample and are re-analyzing dissolved metals to report to the lower QL's. With the exception of Tritium and Strontium, all items will be reported at or below QL's by Monday, March 2nd.

Sincerely,

David B. Stoneman

President

7423 Lee Davis Road • Mechanicsville, VA 23111 • Telephone (804) 559-9004 • Fax (804) 559-9306



ANALYTICAL LABORATORY REPORT

22-Jan-09

Callao Treatment Plant Attn: Lee Bowles 104 Harryhogan Road Callao, VA 22435

Date Received:

13-Jan-09

Date Sampled:

13-Jan-09 0901087-01

Work Order No:

Client ID:	Final Effluent C	omposite		T 81-11i	Date	Time	Tech.
Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Analyzed	Analyzed	Initials
CBOD	<5.0	5.0	mg/L	5210 B	14-Jan-09	8:00	NΑ
TKN	0.56	0,50	mg/L	4500 N/NH ₃	22-Jan-09	8:00	NA
				1	1	<u> </u>	

Date Sampled: Work Order No:

13-Jan-09 0901087-02

Final Effluent Grab

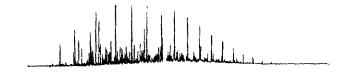
Client ID: Test Description	Final Effluent G Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Time Analyzed	Tech. Initials
Fecal Coliform	<2	2	MiPN/100ml	9221E	13-Jan-09	14:00	AS
E Coli	<2	2	MPN/100ml	9221F	13-Jan-09	14:00	AS
					, 	<u> </u>	

*All methods are from Standard Methods 18th Edition, unless otherwise noted.

Laboratory Manager

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ANALYTICAL LABORATORY REPORT

2-Feb-09

Callao Treatment Plant Attn: Lee Bowles 104 Harryhogan Road Callao, VA 22435

Date Received: Date Sampled:

26-Jan-09

26-Jan-09 0901199-01

Work Order No:

Test Description	Final Eπident C Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Time Analyzed	Tech. Initlals
СВОД	<5.0	5.0	mg/L	5210 B	28-Jan-09	8:00	NA
TKN	1.4	0.5	mg/L	4500 N/NH ₃	26-Jan-09	15:00	NA

Date Sampled:

26-Jan-09

Work Order No:

0901199-02

Client ID:

Final Effluent Grab

Final Result	Reporting	Units of	Method	Date	Time	Tech.
Convit						
resuit	Limit	Measure	Numbers*	Analyzed	Analyzed	Initials
<2	2	MPN/100mi	9221E	26-Jan-09	14:00	AS
<2	2	MPN/100ml	9221F	26-Jan-09	14:00	AS
		-				

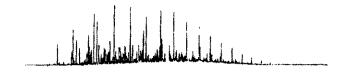
*All methods are from Standard Methods 18th Ecition, unless otherwise noted.

Parry L. Bragg

Laboratory Manager

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ANALYTICAL LABORATORY REPORT

27-Jan-09

Callao Treatment Plant Attn: Lee Bowles 104 Harryhogan Road Callao, VA 22435

Date Received:

20-Jan-09 20-Jan-09 0901144-01

Date Sampled: Work Order No:

Client ID:	Final Effluent (Final Effluent Composite									
Test Description	Final Result	Reporting Limit	Units of Veasure	Method Numbers*	Date Analyzed	Time Analyzed	Tech. Initials				
CBOD	<5.0	5.0	mg/L	5210 B	21-Jan-09	12:00	NA				
TKN	1.68	0.50	mg/L	4500 N/NH ₃	26-Jan-09	15:00	NA				
						1					

Date Sampled: Work Order No:

20-Jan-09 0901144-02

Client ID:

Final Effluent Grab

W/3>Q115 1 mm.	I SEEME SELECTOR COLLEC	ri us					
Test	Final	Reporting	Units of	Method	Date	Time	Tech.
Description	Result	Limit	Measure	Numbers*	Analyzed	Analyzed	initials
Fecal Coliform	<2	2	MPN/100ml	9221E	20-Jan-09	14:00	AS
E Coli	<2	2	MF'N/100mi	9221F	20-Jan-09	14:00	AS
	ł	<u> </u>	ł [

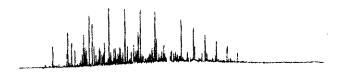
*All methods are from Standard Methods 18th Edition, unless otherwise noted.

Signature:

Laboratory Manager

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ANALYTICAL LABORATORY REPORT

Callao Treatment Plant Attn: Lee Bowles 104 Harryhogan Road Callao, VA 22435

12-Jan-09

Date Received:

5-Jan-09 5-Jan-09

Date Sampled: Work Order No:

0901010-01

	omposite			100	Time or	Tech.
Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Time Analyzed	initials
<5.0	5.0	mg/L	5210 B	7-Jan-09	7:45	NA
1.12	0.50	mg/L	4500 N/NH ₃	8- Jan-09	16:00	NA
<1.0	1.0	mg/L	2540 D	5-Jan-09	13:30	AS
	<5.0 1.12	Result Limit	Result Limit Measure	Result Limit Measure Numbers*	Numbers* Analyzed	Numbers* Analyzed Analyzed Analyzed Analyzed Analyzed

Date Sampled:

5-Jan-09 0901010-02

Work Order No:

Final Effluent Grab

Client ID:	Final Effluent G	rab					70 h
Test Description	Final Resuit	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Time Analyzed	Tech. Initials
Fecal Coliform	2	2	MF'N/100ml	9221E	5-Jan-09	14:00	AS
E Coli	. <2	2	MF'N/100ml	9221F	5-Jan-09	14:00	AS

*All methods are from Standard Methods 18th Edi Ion, unless otherwise noted.

Signature:

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express or implied, as to the interpretation of the analytical results contained in this report. This report is not in the reproduced except with the written approval of Primary Laboratories, inc.

Mosca, Denise

From:

Dana Wilson [dwilson@co.northumberland.va.us]

Sent:

Monday, March 09, 2009 10:25 AM

To:

Mosca, Denise

Subject:

VPDES VA 0091421-Callao WWTF

Attachments:

degletter to send0001.pdf



degletter to send0001.pdf (2 M...

Denise,

Good Morning, Attached is the additional information we received from our Lab to go with the letter sent in February concerning our reissuance. Please let us know if you have any questions.

Thanks, Dana Wilson

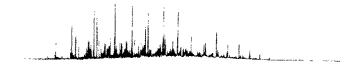
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FACSIMILE TRANSMISSION COVER SHEET

FAX NUMBER (804) 559-9306

DATE:	3-3-0.9		TIME:
PLEASE DELIVER T	HE FOLLOWI	NG PAGES	TO:
NAME:	DAN	1 W	1 Son
LOCATION:		er 10 s so n Marines o was a son Marines of a son of son	
FAX NUMBER:	*		
THIS TELECOPY IS			
NAME:	DAVICE	57	JUE MAN
TOTAL NUMBER OF SHEET.	PAGES IS	INCL	UDING COVER
COMMENTS:	AII L	3aT	TRITIUM

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ANALYTICAL LABORATORY REPORT DRAFT COPY

Callao Treatment Plant Attn: Lee Bowles 104 Harryhogan Road Callao, VA 22435

3-Mar-09

Date Received:

15-Jan-09

Date Sampled:

15-Jan-09

Work Order No:

0901117-01

Client ID:	Final Effluen	t Grab				
Test	Final	Reporting	Units of	Method	Date	Tech.
Description	Result	Limit	Measure	Numbers*	Analyzed	initials
Dissolved Metals Antimony	<0.2	0.2	ug/L	EPA 200.2/3120B	26-Feb-09	HV
Arsenic	<50.0	50.0	ug/L	EPA 200.2/3120B	16-Jan-09	HV
Cadmium	<0.3	0.3	ug/L	EPA 200.2/3120B	27-Feb-09	HV
Chromium	<0.5	0.5	ug/L	EPA 200.2/31208	27-Feb-09	HV
Copper	<0.5	0.5	ug/L	EPA 200.2/3120B	27-Feb-09	нv
Lead	<0.5	0.5	ug/L	EPA 200.2/3120B	3-Mar-09	нν
Mercury	<0.2	02	ug/L	3112B	22-Jan-09	HV
Nickel	<0.5	0.5	ug/L	EPA 200.2/3120B	26-Feb-09	н
Selenium	<2.0	2.0	ug/L	EPA 200 2/3120B	26-Feb-09	HV
Silver	<0.2	0.2	ug/L	EPA 200 2/3120B	27-Feb-09	н
Thallium	<20	2.0	ug/L	EPA 200.2/3113B	21-Jan-09	н۷
Zinc	420	100	ug/L	EPA 200.2/3120B	16-Jan-09	н
	**************************************		Books - Department of the		Average and a second a second and a second a	PAMACHEROPOPOR
Chromium VI	<0.5	0.5	ug/L	3500	15-Jan-09	NA

Primary Laboratories, Inc. Results

3-Mar-09

Method Numbers*:

EPA 625

Date Analyzed:

22-Jan-09

Technician:

HV

Units of Measure:

ug/L

Date Sampled:

15-Jan-09

Work Order No:

0901117-01

110111 01001 1101	0001117-01	
Client ID:	Final Effluent	Grab
Test	Final	Detection
Description	Result	Limit
Semi-Volatiles		
Acenaphthene	<5	5
Anthracene	<5	5
Benzidine	<5	5
Benzo(a) anthracene	<5	5
Benzo(b) fluoranthene	<5	5
Benzo(k) fluoranthene	<5	5
Benzo(a)pyrene	<5	5
bis-(2-Chloroethyl)ether	<5	5
bis-(2-Chloroisopropyl)ether	<5	5
Butyl benzyl phthalate	<5	5
2-Chloronaphthalene	<5	5
Chrysene	<5	5
Dibenzo(a,h)anthracene	<5	5
Dibutyl phthalate	<5	5
3,3-Dichlorobenzidine	<5	5
Diethyl phthalate	<5	5
Di-2-ethylhexyl Phthalate	<5	5
Dimethyl phthalate	<5	5
2,4-Dinitrotoluene	<5	5
1,2-Diphenylhydrazine	<5	5
Fluoranthene	<5	5
Fluorene	<5	5
Hexachlorobenzene	<5	5
Hexachlorobutadiene	<5	5
Hexachlorocyclopentadiene	<5	5
Hexachloroethane	₹ 5	5
Indeno(1,2.3-cd) pyrene	<5	5
Isophorone	<5	5
Nitrobenzene	<5	5
N-Nitrosodimethylamine	<5	5
N-Nitrosodiphenylamine	<5	5
N-Nitrosodi-n-propylamine	<5	5
Pyrene	<5	5
1,2,4-Trichlorobenzene	<5	5

Primary Laboratories, Inc. Results

3-Mar-09

Method Numbers*: EPA 624
Date Analyzed: 21-Jan-09
Technician: PB
Units of Measure: ug/L
Date Sampled: 15-Jan-09
Work Order No: 0901117-01

THUS CAUCALITY.	000111701	
Cflent ID:	Final Effluent	Grab
Test	Final	Detection
Description	Result	Limit
Acrolein	<5	5
Acrylonitrile	<5	5
Benzene	<5	5
Bromoform	<5	5
Carbon tetrachloride	<5	5
Chlorobenzene	<5	5
Chlorodibromomethane	<5	5
Chloroform	<5	5
1,2-Dichlorobenzene	<5	5
1,3-Dichlorobenzene	<5	5
1,4-Dichlorobenzene	<5	5
Dichlorobromomethane	<5	5
1,2-Dichloroethane	<5	5
1,1-Dichloroethylene	<5	5
trans-1,2-Dichloro-ethylene	<5	5
1.2-Dichloropropane	<5	5
1,3-Dichloropropene	<5	5
Ethylbenzene	<5	5
Methyl Bromide	<5	5
Methylene Chloride	<5	5
1,1,2,2-Tetrachloro-ehtane	<5	5
Tetrachloroethylene	<5	5
Toluene	<5	5
1,1,2-Trichloroethane	<5	5
Trichloroethylene	<5	5
Vinyl Chloride	≪5	5
A SECONDARY		

dichoramethers.

03/03/2009 15:44

Primary Laboratories, Inc. Results

3-Mar-09

Date Sampled:

15-Jan-09 0901117-01

Work Order No:

Client ID:	Final Ciliago	t Grap				
Test	Final	Reporting	Units of	Method	Date	Tech.
Description	Result	<u> Limit</u>	Measure	Numbers*	Analyzed	Initials
Chlorides	41.50	0.01	mg/L	4500CL B	21-Jan-09	NA
Cyanide	<0.01	0.01	mg/L	4500CN E	16-Jan-09	AS
Hydrogen Sulfide	<0.05	0.05	m g/ L	376.1	23-Jan-09	HV
	1				<u> </u>	<u> </u>

Method Numbers*:

EPA 625

Date Analyzed:

22-Jan-09

Technician:

HV

Units of Measure:

ug/L

Date Sampled:

15-Jan-09

Work Order No:

0901117-01

Client (D:	Final Effluent	Grab
Test	Final	Detection
Description	Result	Limit
Acid Extractables		
2-Chlorophenol	<5	5
2,4-Dichlorophenol	<5	5
2,4-Dimethylphenol	<5	5
2,4-Dinitrophenol	<5	5
2-Methyl-4,6-Dinitrophenol	<5	5
Pentachlorophenol	<5	5
Phenoi	<5	5
2,4,6-Trichlorophenol	<5	5
•		

Primary Laboratories, Inc. Results

3-Mar-09

Date Sampled: Work Order No:

15-Jan-09 0901117-01

Client iD:

Final Effluent Grab

Latett mistrati	; />14D				T
Final	Reporting	Units of			Tech.
Result	Limit	Measure	Numbers"	Analyzed	Initials
<0.2	0.2	ug/L		1	SC**
<1	1	ug/L	622		SC**
<1	1	ug/L	622		SC**
<1	1	ug/L	622	1	SC**
<1	1	ug/L	622	11-Feb-09	sc**
38	30	ng/L	GC/FPD	3-Feb-09	sc*
	Final Result <0.2 <1 <1 <1 <1 <1 <1	Final Reporting Result Limit <0.2 0.2 <1 1 <1 1 <1 1 <1 1	Result Limit Measure	Final Reporting Result Units of Limit Method Numbers* <0.2	Final Result Reporting Limit Units of Measure Method Numbers* Date Analyzed <0.2

Date Sampled:

15-Jan-09 0901117-01

Work Order No:

Final Effluent Grab

Client ID:	Final Effluent	Grab				1
Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech. Initials
Gross Alpha Particle	2,2 +/- 0.8	1.0	pCi/I	900.0	22-Jan-09	sc-
Beta & Photon Activity	33 +/- 1	1.4	pCi/l	900.0	22-Jan-09	sc-
Strontium-90	1.4 +/- 0.6	10	pCi/l	905.8	2-Feb-09	sc**
Tritium					The state of the s	SC**
	1					<u> </u>

^{**} Analysis sub-contracted.

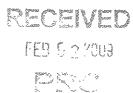
Parry L. Bragg

Laboratory Manager

Date:

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[&]quot;All methods are from Standard Methods 18th Edition, unless otherwise noted.



MEMORANDUM

TO:

DENISE MOSCA

FROM:

KENNETH D. EADES, COUNTY ADMINISTRATOR.

SUBJECT:

CALLAO WWTP APPLICATION

DATE:

12/17/2008

1/29/09

Enclosed is the application to renew our VPDES Permit for the Callao Wastewater Plant. Please let us know if you need additional information.

Thank you

SUPERVISORS

Ronald L. Jett, Chairman Heathsville, VA 22473 District V

Richard F. Haynie, Vice-Chairman Heathsville, VA 22473 District II

A. Joseph Self, Sr. Callao, VA 22435 District I

James M. Long Wicomico Church, VA 22579 District III

Thomas H. Tomlin Wicomico Church, VA 22579 District IV



Northumberland County, Virginia

Board of Supervisors

P.O. Box 129 • 72 Monument Place Heathsville, Virginia 22473

December 17, 2008

Ms. Denise Mosca Department of Environmental Quality Piedmont Regional Office 4949-A Cox Road Glen Allen, Virginia 23060

RE: VPDES Permit VA0091421, Survey Form Results

Dear Ms. Mosca:

The letter is written to summarize industrial pretreatment survey (special condition No. 11).

Mr. Clifton Lee Bowles stated that only 3 locations within the Callao area that are on sewer have to be treated with degreaser once a month. Those locations are Callao Dairy Freeze, Callao Supermarket and Callao Apartments. The Callao Dairy Freeze and the Callao Supermarket are both equipped with grease traps and are being used. Mr. Bowles stated that this is a very small problem and not one to cause any further problems.

If you have any questions regarding this issue, please don't hesitate to ask.

Kenneth D. Eades

Sincered

County Administrator

COUNTY ADMINISTRATOR

Kenneth D. Eades Heathsville, VA 22473 804-580-7666 (Voice) 804-580-7053 (Fax) keades@co.northumberland.va.us

COUNTY ATTORNEY

W. Leslie Kilduff, Jr. 804-435-0851 (Voice) 804-435-0551 (Fax)

PUBLIC NOTICE BILLING INFORMATION FORM

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290. C. 2.

Agent/Department to be billed:

Agent/Department to be billed:	Northumberland Santary District
Owner:	Northumberland
Applicant's Address:	Kenneth P. Eades
	P.O. Box 129
	Heathsville, VA 22473
Agent's Telephone No:	804-580-7666
Authorizing Agent:	Signature Signature
Facility Name:	Callao WWTP
Permit No:	VA0091421

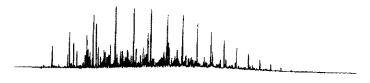
Please return to:

Denise Mosca DEQ – Piedmont Regional Office 4949 A-Cox Road Glen Allen, VA 23060 804-527-5027

Fax Number: 804-527-5106

Primary Laboratories, Inc.

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ANALYTICAL LABORATORY REPORT DRAFT COPY

Callao Treatment Plant Attn: Lee Bowles 104 Harryhogan Road Callao, VA 22435

27-Jan-09

Date Received:

15-Jan-09

Date Sampled: Work Order No:

15-Jan-09 0901117-01

Client ID:

Client ID:	Final Effluer	nt Grab				
Test	Final	Reporting	Units of	Method	Date	Tech.
Description	Result	Limit	Measure	Numbers*	Analyzed	Initials
Dissolved Metals Antimony	<0.100	0.100	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Arsenic	<0.050	0.050	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Cadmium	<0.010	0.010	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Chromium	<0.020	0.020	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Copper	<0.020	0.020	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Lead	<0.050	0.050	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Mercury	<0.0002	0.0002	mg/L	3112B	22-Jan-09	HV
Nickel	<0.020	0.020	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Selenium	<0.050	0.050	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Silver	<0.020	0.020	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Thallium	<0.002	0.002	mg/L	EPA 200.2/3113B	21-Jan-09	HV
Zinc	0.042	0.010	mg/L	EPA 200.2/3120B	16-Jan-09	HV
Chromium VI	<0.005	0.005	mg/L	3500	15 (nn 00	N 14
	10.000	0.003	mg/L	3500	15-Jan-09	NA

Primary Laboratories, Inc. Results

27-Jan-09

Date Sampled:

15-Jan-09 0901117-01

Work Order No:

Client ID:	Final Effluen	t Grab				
Test	Final	Reporting	Units of	Method	T 6-4-	1
Description	Result	Limit	Measure	Numbers*	Date	Tech
Pesticides			77.020010	140110Ct3	Analyzed	Initial
Áldrin	<0.10	0.10	ug/L	EPA 608	20 1 00	
Chlordane	<0.10	0.10	ug/L		22-Jan-09	HV
4,4-DDD	<0.10	0.10	ug/L ug/L	EPA 608	22-Jan-09	HV
4,4-DDE	<0.10	0.10		EPA 608	22-Jan-09	HV
4,4-DDT	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Dieldrin	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Endosulfan (alpha)	<0.50	0.50	ug/L	EPA 608	22-Jan-09	H∨
Endosulfan (beta) ⊂	<0.50	0.50	ug/L	EPA 608	22-Jan-09	HV
Endosulfan sulfate	<0.50	0.50	ug/L	EPA 608	22-Jan-09	HV
Éndrin	<0.50	0.50	ug/L	EPA 608	22-Jan-09	HV
Endrin Aldehyde	<0.50	1	ug/L	EPA 608	22-Jan-09	HV
eptachlor	1	0.50	ug/L	EPA 608	22-Jan-09	HV
leptachlor Epoxide	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Ipha-BHC	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Beta-BHC	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
Samma-BHC (Lindane)	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
(epone	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
ethoxychlor	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
firex	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
CB-1260	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
CB-1254	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
CB-1248	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
CB-1242	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
CB-1232	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
CB-1221	<0.20	0.20	ug/L	EPA 608	22-Jan-09	
CB-1016	<0.20	0.20	ug/L	EPA 608		HV
CB Total	<0.20	0.20	ug/L	EPA 608	22-Jan-09	HV
oxaphene	<0.10	0.10	ug/L	EPA 608	22-Jan-09	HV
-			~g/ L	EFA 000	22-Jan-09	HV

Primary Laboratories, Inc. Results

27-Jan-09

Method Numbers*: EPA 625
Date Analyzed: 22-Jan-09
Technician: HV
Units of Measure: uc//

Units of Measure: ug/L
Date Sampled: 15-Jan-09
Work Order No: 0901117-01

vvork Order No:	0901117-01				
Client ID:	Final Effluent Grab				
Test	Final	Detection			
Description	Result	Limit			
Semi-Volatiles					
Acenaphthene	<5	5			
Anthracene	<5	5			
Benzidine	<5	5			
Benzo(a) anthracene	<5	5			
Benzo(b) fluoranthene	<5	5			
Benzo(k) fluoranthene	<5	5			
Benzo(a)pyrene	<5	5			
bis-(2-Chloroethyl)ether	<5	5			
bis-(2-Chloroisopropyl)ether	<5	5			
Butyl benzyl phthalate	<5	5			
2-Chloronaphthalene	<5	5			
Chrysene	<5	5			
Dibenzo(a,h)anthracene	<5	5			
Dibutyl phthalate	<5	5			
3,3-Dichlorobenzidine	<5	5			
Diethyl phthalate	<5	5			
Di-2-ethylhexyl Phthalate	<5	5			
Dimethyl phthalate	<5	5			
2,4-Dinitrotoluene	<5	5			
1,2-Diphenylhydrazine	<5	5			
Fluoranthene	<5	5			
Fluorene	<5	5			
Hexachlorobenzene	<5	5			
Hexachlorobutadiene	<5	5			
Hexachiorocyclopentadiene	<5	5			
Hexachloroethane	<5	5			
Indeno(1,2,3-cd) pyrene	<5	5			
Isophorone	<5	5			
Nitrobenzene	<5	5			
N-Nitrosodimethylamine	<5	5			
N-Nitrosodiphenylamine	<5	5			
N-Nitrosodi-n-propylamine	<5	5			
Pyrene	<5	5			
1,2,4-Trichlorobenzene	<5	5			

Primary Laboratories, Inc. Results

27-Jan-09

Method Numbers*:

EPA 624

Date Analyzed:

21-Jan-09

Technician:

Units of Measure:

PB

Date Sampled:

ug/L

Work Order No:

15-Jan-09 0901117-01

Client ID:

Client ID:	Final Effluent Grab				
Test	Final	Detection			
Description	Result	Limit			
Acrolein	<5	_			
Acrylonitrile	<5	5 5			
Benzene	<5	5			
Bromoform	<5	5			
Carbon tetrachloride	<5	5			
Chlorobenzene	<5	5			
Chlorodibromomethane	<5	5			
Chloroform	<5	5			
1,2-Dichlorobenzene	<5	5			
1,3-Dichlorobenzene	<5	5			
1,4-Dichlorobenzene	<5	5			
Dichlorobromomethane	<5	5			
1,2-Dichloroethane	<5	5			
1,1-Dichloroethylene	<5	5			
trans-1,2-Dichloro-ethylene	<5	5			
1,2-Dichloropropane	<5	5			
1,3-Dichloropropene	<5	5			
Ethylbenzene	<5	5			
Methyl Bromide	<5	5			
Methylene Chloride	<5	5			
1,1,2,2-Tetrachloro-ehtane	<5	5			
Tetrachloroethylene	<5	5			
Toluene	<5	5			
1,1,2-Trichloroethane	< 5	5			
Trichloroethylene	<5	5			
Vinyl Chloride	<5	5			

Primary Laboratories, Inc. Results

27-Jan-09

Date Sampled:

15-Jan-09

Work Order No:

0901117-01

Client ID:

Final Effluent Grab

	Laren Crustalit	GIAD				
Test Description	Final Result	Reporting Limit	Units of Measure	Method Numbers*	Date Analyzed	Tech.
Chlorides	41.50	0.01	mg/L	4500CLB	21-Jan-09	NA
Cyanide	<0.01	0.01	mg/L	4500CN E	16-Jan-09	AS
Hydrogen Sulfide	<0.05	0.05	mg/L	376.1	23-Jan-09	HV

Method Numbers*:

EPA 625

Date Analyzed:

22-Jan-09

Technician: Units of Measure:

HV

Date Sampled:

ug/L 15-Jan-09

Work Order No:

0901117-01

Client ID:

Final Effluent Grah

Ciletti (D):	Final Effluent Grab				
Test	Final	Detection			
Description	Result	Limit			
Acid Extractables					
2-Chlorophenol	<5	5			
2,4-Dichlorophenol	<5	5			
2,4-Dimethylphenol	<5	5			
2,4-Dinitrophenol	<5	5			
2-Methyl-4,6-Dinitrophenol	<5	5			
Pentachlorophenol	<5	5			
Phenol	<5	5			
2,4,6-Trichlorophenol	<5	5			
	1				

^{*}All methods are from Standard Methods 18th Edition, unless otherwise noted.

Signature:

Parry L. Bragg Laboratory Manager Date:

These analytical results are based upon materials provided by the client and are intended for the exclusive use of the client. These enalytical results represent the best judgement of Primary Laboratories, Inc. Primary Laboratories, Inc. assumes no responsibility, express or implied, as to the interpretation of the analytical results contained in this report. This report is not to be reproduced except with the written approval of Primary Laboratories, Inc.

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DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY MONITORING

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY ⁽³⁾		
DISSOLVED METALS								
7440-36-0	Antimony	(4)	0.2 2/6	Z.1 (NO	G G	1/5 YR		
7440-38-2	Arsenic	(4)	(6) ~ 5 e	4.050	G	1/5 YR		
7440-43-9	Cadmium	(4) * * *	0.3	<0.010	G	1/5 YR		
16065-83-1	Chromium III	(4)	0.5	40.020	G	1/5 YR		
18540-29-9	Chromium VI	(4)	0.5	+5 ug/L	G	1/5 YR		
7440-50-8	Copper	(4)	0.5 420	1.020	G	1/5 Y R		
7439-92-1	Lead	(4)	0.5 _{/ 56}	4.050	G	1/5 YR		
743 9 -97-6	Mercury	(4)	1.0 40,7	4.000a	G	1/5 YR		
7440-02-0	Nickel	(4) 🥱 🛠	0.5 ~20	Z0.020	G	1/5 YR		
7782-49-2	Selenium	(4) ×.0	2.0 <i>c</i> 50	Z0.050	G	1/5 YR		
7440-22-4	Silver	(4)	0.2 _{~ 20}	20.020	G	1/5 YR		
7440-28-0	Thallium	(5)	(6) < 2	20.602	G	1/5 YR		
7440-66-6	Zinc	(4)	2.0 442	.042	G	1/5 YR		
		PESTICIDE	S/PCB'S					
309-00-2	Aldrin	608	0.05	<0.10	G or C	1/5 YR		
57-74-9	Chlordane	608	0.2	40.10	G or C	1/5 YR		
2921-88-2	Chlorpyrifos (Dursban)	622	(6)		G or C	1/5 YR		
72-54-8	DDD	608	0.1	40.10	G or C	1/5 YR		
72- 5 5- 9	DDE	608	0.1	20.10	G or C	1/5 YR		
50-29-3	DDT	608	0.1	40.10	G or C	1/5 YR		
8065-48-3	Demeton	(5)	(6)		G or C	1/5 YR		
60-57-1	√Dieldrin	608	0.1	∠0.l0	GorC	1/5 YR		
959-98-8	Alpha-Endosulfan	608	0.1	40.50	GorC	1/5 YR		
33213-65-9	Beta-Endosulfan	608	0.1	<u> </u>	G or C	1/5 YR		
1031-07-8	Endosulfan Sulfate	608	0.1	۷٥.50	G or C	1/5 YR		
72-20-8	Endrin	608	0.1	4050	G or C	1/5 YR		
7421-93-4	Endrin Aldehyde	(5)	(6)	40.50	GorC	1/5 YR		

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DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY MONITORING

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY ⁽³⁾
86-50-0	Guthion	622	(6)		G or C	1/5 YR
76-44-8	Heptachlor	608	0.5	Z0.10	G or C	1/5 YR
1024-57-3	Heptachlor Epoxide	(5)	(6)	20.10	G or C	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608	(6)	20.10	G or C	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608	(6)	40.10	G or C	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC or Lindane	608	0.05	40.10	G or C	1/5 Y R
143-50-0	Kepone	(10)	(6)	40.10	G or C	1/5 Y R
121-75-5	Malathion	(5)	(6)		G or C	1/5 YR
72- 43 -5	Methoxychior	(5)	(6)	40.10	G or C	1/5 YR
2385-85-5	Mirex	(5)	(6)	20.10	G or C	1/5 YR
56-38-2	Parathion	(5)	(6)		G or C	1/5 YR
11096-82-5	PCB 1260	608	1.0	40.70	GorC	1/5 YR
11097-69-1	PCB 1254	608	1.0	40.20	GorC	1/5 YR
12672-29-6	PCB 1248	608	1.0	40.20	G or C	1/5 YR
53469-21-9	PCB 1242	608	10	40.20	G or C	1/5 YR
11141-16-5	PCB 1232	608	1.0	20.70	GorC	1/5 YR
11104-28-2	PCB 1221	608	1.0	20.20	G or C	1/5 YR
12674-11-2	PCB 1016	608	1.0	40.20	G or C	1/5 Y R
1336-36-3	PCB Total	608	7.0	40.20	GorC	1/5 YR
8001-35-2	Toxaphene	608	5.0	20.10	GorC	1/5 YR
60-10-5	Tributyltin	(8)	(6)		G or C	1/5 YR
	BASE I	VEUTRAL E	XTRACTAE	BLES		<u> </u>
83-32-9 -	Аселарhthene	625	10.0	45	G or C	1/5 YR
120-12-7	Anthracene	625	10.0	45	GorC	1/5 YR
92-87-5	Benzidine	(5)	(6)	45	G or C	1/5 YR
56-55-3	Benzo (a) anthracene	625	10 0	45	GorC	1/5 YR
20 5-99- 2	Benzo (b) fluoranthene	625	100	<u> </u>	G or C	1/5 YR
207-08-9	Benzo (k) fluoranthene	625	10.0	45	GorC	1/5 YR
50-32-8	Benzo (a) pyrene	625	100	<u>45</u>	G or C	1/5 YR

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DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY MONITORING

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY ¹³
111-44-4	Bis 2-Chloroethyl Ether	(5)	(6)	45	G or C	1/5 YR
39638-32-9	Bis 2-Chlorolsopropyl Ether	(5)	(6)	45	G or C	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0	45	G or C	1/5 YR
91-58-7	2-Chloronaphthalene	(5)	(6)	∠5	G or C	1/5 YR
218-01-9	Chrysene	625	10.0	4 5	G or C	1/5 YR
53 -70-3 *	Dibenz(a,h)anthracene	625	20.0	4 5	G or C	1/5 YR
84-74-2	Dibutyl phthalate (synonym = Di-n-Butyl Phthalate	625	10.0	45	G or C	1/5 YR
95-50-1	1,2-Dichlorobenzene	625	10.0	4.5	G or C	1/5 YR
541-73-1	1,3-Dichlorobenzene	625	10.0	4.5	G or C	1/5 YR
106-46-7	1,4-Dichlorobenzene	625	10.0	-5	G or C	1/5 YR
91-94-1	3,3-Dichlorobenzidine	(5)	(6)	45	G or C	1/5 YR
84-66-2	Diethyl phthalate	625	10.0	< <u>5</u>	G or C	1/5 YR
117-81-7	Di-2-Ethylhexyl Phthalate	625	10.0	≺ 5	G or C	1/5 YR
131-11-3	Dimethyl phthalate	(5)	(6)	45	G or C	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10,0	< 5	G or C	1/5 YR
122-66-7	1,2-Diphenylhydrazine	(5)	(6)	< 5	G or C	1/5 YR
206-44-0	Fluoranihene	625	10.0	45	G or C	1/5 YR
86-73-7	Fluorene	625	10.0	45	GorC	1/5 YR
118-74-1	Hexachlorobenzene	(5)	(6)	∠ 5	G or C	1/5 YR
87-68-3	Hexachlorobutadiene	(5)	(6)	∠ 5	G or C	1/5 YR
77-47-4	Hexachlorocyclopentadiene	(5)	(6)	45	GorC	1/5 YR
67-72-1	Hexachloroethane	(5)	(6)	45	GorC	1/5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	625	20.0	< 5	G or C	1/5 YR
78-59-1	Isophorone	625	10.0	45	G or C	1/5 YR
98-95-3	Nitrobenzene	625	10.0	45	GorC	1/5 YR
62-75-9	N-Nitrosodimethylamine	(5)	(6)	45	G or C	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	(5)	(6)	45	GorC	1/5 YR
86-30-6	N-Nitrosodiphenylamine	(5)	(6)	45	GorC	1/5 YR

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DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY MONITORING

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL(1)	REPORTING RESULTS	SAMPLE TYPE ⁽²⁾	SAMPLE FREQUENCY ^{II}
129-00-0	Pyrene	625	10.0	45	G or C	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0	< 5	GorC	1/5 YR
		VOLAT	ILES			
107-02-8	Acrolein	(5)	(6)	45	G	1/5 YR
107-13-1	Acrylonitrile	(5)	(6)	45	G	1/5 YR
71-43-2	Benzene	624	10.0	< 5	G	1/5 YR
75-25-2	Bromoform	624	10.0	< 5	G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0	45	G	1/5 YR
108-90-7	Chlorobenzene (synonym = monochlorobenzene)	624	50.0	۷5	G	1/5 YR
124-48-1	Chlorodibromomethane	624	10.0	45	G	1/5 YR
67-66-3	Chloroform	624	10.0	< 5	G	1/5 YR
75-09-2	Dichloromethane	624	20.0	∠ 5	G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0	<5	G	1/5 YR
107-06-2	1,2-Dichloroethane	624	10.0	45	G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0	45	G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	(5)	(6)	Z5	G	1/5 YR
78-87-5	1,2-Dichioropropane	(5)	(6)	45	G	1/5 YR
542-75-6	1,3-Dichloropropene	(5)	(6)	45	G	1/5 YR
100-41-4	Ethylbenzene	624	10.0	< 5	G	1/5 YR
74-83-9	Methyl Bromide	(5)	(6)	45	G	1/5 YR
79-34-5	1,1,2,2-Tetrachioroethane	(5)	(6)	45	G	1/5 YR
127-18-4	Tetrachloroethylene	624	10.0	<5	G	1/5 Y R
10-88-3	Toluene	624	10.0	۷5	G	1/5 YR
79-00-5	1,1,2-Trichloroethane	(5)	(6)	45	G	1/5 YR
79-01-6	Trichloroethylene	624	10.0	45	G	1/5 YR
75-01-4	Vinyl Chloride	624	100	25	G	1/5 YR

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DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY MONITORING

OUTFALL NO. 001

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL ⁽¹⁾	REPORTING RESULTS	SAMPLE TYPE ²	SAMPLE FREQUENCY ¹³	
		RADIONU	CLIDES				
	Strontium 90 (pCi/L)	(5)	(6)		GorC	1/5 YR	
	Tritium (pCi/L)	(5)	(6)		G or C	1/5 YR	
***************************************	Beta Particle & Photon Activity (mrem/yr)	(5)	(6)		GorC	t/5 YR	
	Gross Alpha Particle Activity (pCi/L)	(5)	(6)		G or C	t/5 YR	
	AC	ID EXTRA	CTABLES				
95-57-8	2-Chlorophenol	625	10.0	45	G or C	1/5 YR	
120-83-2	2,4 Dichlorophenol	625	10.0	45	GorC	t/5 YR	
105-67-9	2,4 Dimethylphenol	625	10.0	45	GorC	1/5 YR	
51-28-5	2,4-Dinitrophenol	(5)	(6)	45	G or C	1/5 YR	
534-52-1	2-Methyl-4,6-Dinitrophenol	(5)	(6)	45	G or C	1/5 YR	
87-86-5	Pentachlorophenol	625	50.0	<5	GorC	t/5 YR	
108-95-2	Phenol ⁽⁷⁾	625	to.0	۷5	G or C	1/5 YR	
88-06-2	2,4,6-Trichlorophenol	625	10.0	45	G or C	1/5 YR	
		MISCELLA	NEOUS				
16887-00-6	Chlorides	(5)	(6)	41.5		t/5 YR	
57-12-5	Cyanide, Total	335.2	10.0	<0.0/M	∫ G	1/5 YR	
7783-06-4	Hydrogen Sulfide	(5)	(6)	40.05	Malco	1/5 YR	

Name of Principal Ejec. Officer or Authorized Agent/Title

Signature of Principal Officer or Authorized Agent/Date

1/29/09

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

VPDES Permit Application Addendum
1. Entity to whom the permit is to be issued: Nopthumber land. Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may may not be the facility or property owner.
2. Is this facility located within city or town boundaries? Y/N
3. Provide the tax map parcel number for the land where the discharge is located. \$\int_{\text{O}} - - 4 \location\$ 4. For the facility to be covered by this permit, how many acres will be disturbed during the next fine years due to new construction activities? \(\text{N} \rightarrow \text{P}
5. What is the design average effluent flow of this facility? MGD For industrial facilities, provide the max. 30-day average production level, include units:
In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y/N If "Yes", please identify the other flow tiers (in MGD) or production levels:
Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plot expand operations during the next five years? Is your facility's design flow considerably greater than your curreflow?
6. Nature of operations generating wastewater: Residental - Commercial
77 % of flow from domestic connections/sources Number of private residences to be served by the treatment works:
23 % of flow from non-domestic connections/sources
7. Mode of discharge: X Continuous Intermittent Seasonal Describe frequency and duration of intermittent or seasonal discharges:
8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point: Permanent stream, never dry Intermittent stream, usually flowing, sometimes dry Ephemeral stream, wet-weather flow, often dry Effluent-dependent stream, usually or always dry without effluent flow Lake or pond at or below the discharge point Other:
9. Approval Date(s): O & M Manual Nov. 1, 2006 Sludge/Solids Management Plan Nov. 1, 2006

VPDES Permit Manual – Section L Revised Last: June 15, 2007

Have there been any changes in your operations or procedures since the above approval dates? Y (N)

FACILITY NAME: Callao WWTP

VPDES PERMIT NUMBER: VA 0091421

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

tu
ty
47 <i>3</i>
135
73
s received or applied
3 ICL

	Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country?YesNo If "Yes", describe:						
5.	Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:						
	 a. Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored, treated, or disposed. b. Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries. 						
6.							
7.	Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation, treatment, use or disposal the responsibility of a contractor? Yes X No						
	If "Yes", provide the following for each contractor (attach additional pages if necessary).						
	Name:						
	Mailing address:						
	Street or P.O. Box:						
	City or Town: State: Zip:						
	Phone: ()						
	Contractor's Federal, State or Local Permit Number(s) applicable to this facility's sewage sludge:						
	If the contractor is responsible for the use and/or disposal of the sewage sludge, provide a description of the service to be provided to the applicant and the respective obligations of the applicant and the contractor(s).						
₿.	Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected us						

8 disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	NA	****		
Cadmium				
Chromium	`` //			
Copper	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
Lead	N 1/			
Mercury	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
Molybdenum	~ (/			
Nickel	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
Selenium	~ ~ ~	······································		
Zinc				

FACILITY NAME: <u>Callad</u> WWTP

VPDES PERMIT NUMBER: VH 009 1421

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1.	An To	Amount Generated On Site. Total dry metric tons per 365-day period generated at your facility: 2.3 dry metric tons						
2.	An dis	Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or lisposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage ludge from more than one facility, attach additional pages as necessary.						
	a.	Facility name: NA						
	b.	Contact Person:						
		Title:						
		Phone: ()						
	c.	Mailing address:						
		Street or P.O. Box:						
		City or Town: State: Zip:						
	d.	Facility location:						
		(not P.O. Box)						
	e.	Total dry metric tons per 365-day period received from this facility: dry metric tons						
	f.	Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:						
3.	Tre a.	watment Provided at Your Facility. Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown						
	b.	Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce						
		pathogens in sewage sludge: <u>Aerobic Digestion</u>						
	c,	Which vector attraction reduction option is met for the sewage sludge at your facility?						
		Option 1 (Minimum 38 percent reduction in volatile solids)						
		Option 2 (Anaerobic process, with bench-scale demonstration)						
		Option 3 (Aerobic process, with bench-scale demonstration)						
		Option 4 (Specific oxygen uptake rate for aerobically digested sludge)						
		Option 5 (Aerobic processes plus raised temperature)						
		Option 6 (Raise pH to 12 and retain at 11.5)						
		Option 7 (75 percent solids with no unstabilized solids)						
		Option 8 (90 percent solids with unstabilized solids)						
		None or unknown						
(1.	Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector						
		attraction properties of sewage sludge: <u>Aerobic</u> Digestion						
•		Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above:						

FA	CH	LITY NAME: COLLOO WOTP VPDES PERMIT NUMBER: VA 009 1421
4.	Pr	reparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and the of Vector Attraction Reduction Options 1-8 (EQ Sludge).
	(I)	sewage sludge from your facility does not meet all of these criteria, skip Question 4.)
	a.	Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land:
	b.	Is sewage sludge subject to this section placed in bags or other containers for sale or give-away? YesNo
5.	Sa	le or Give-Away in a Bag or Other Container for Application to the Land.
	(C)	omplete this question if you place sewage sludge in a bag or other container for sale or give-away prior to land plication. Skip this question if sewage sludge is covered in Question 4.)
	a.	Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for
		sale or give-away for application to the land: MA dry metric tons
	b.	Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container for application to the land.
6.	Sh	ipment Off Site for Treatment or Blending.
	Ski	omplete this question if sewage sludge from your facility is sent to another facility that provides treatment or nding. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. In this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one ility, attach additional sheets as necessary.)
	a.	Receiving facility name: Reedville Wastewater Treatment Facility
	b,	Facility contact: Sterlains lee Boulas, TT
		Title: Plant Manager
		Phone: (804) 453-3600- 804-529-6108
	c.	Mailing address:
		Street or P.O. Box 129
	.1	City or Town: Heathsville, State: VA Zip: 22473
	d.	Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: A s 3 dry metric tons
	e.	List, on this form or an attachment, the receiving facility's VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the receiving facility's sewage sludge use or disposal practices:
		Permit Number: Type of Permit: VA OX 60712 VPDES
	f.	Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? Yes No
		Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility? Class A Class B Neither or unknown
		Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce
		pathogens in sewage sludge: NA
į	g.	Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge?YesNo
		Which vector attraction reduction option is met for the sewage sludge at the receiving facility?
		Option 1 (Minimum 38 percent reduction in volatile solids)
		Option 2 (Anaerobic process, with bench-scale demonstration)

FACI	LITY NAME: <u>Called WTP</u> vpdes permit number: <u>VA 0091</u> 42
	Option 3 (Aerobic process, with bench-scale demonstration)
	Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
	Option 5 (Aerobic processes plus raised temperature)
	Option 6 (Raise pH to 12 and retain at 11.5)
	Option 7 (75 percent solids with no unstabilized solids)
	Option 8 (90 percent solids with unstabilized solids)
	None unknown
	Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce
	vector attraction properties of sewage sludge:
h.	Does the receiving facility provide any additional treatment or blending not identified in f or g above? Yes No
	If "Yes", describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:
ì.	If you answered "Yes" to f, g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.
j	Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? YesNo
	If "Yes", provide a copy of all labels or notices that accompany the product being sold or given away.
k.	Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? Yes No. If "No", provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.
	Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week
	and the times of the day sewage sludge will be transported. RTS 6225. to R+360, E.
	to Rt 657, S. to Rt 659 to plant, one or two trucks
	permonth, during week day, anytime of day
. La	and Application of Bulk Sewage Sludge.
(C Qu	omplete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in uestions 4, 5 or 6. Complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)
a.	Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:
b.	Do you identify all land application sites in Section C of this application? Yes No
	If "No", submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
c.	Are any land application sites located in States other than Virginia? Yes No
	If "Yes", describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.
d.	Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in
	Appendix IV).

7.

FACILITY NAME: Callad WLOTP VPDES PERMIT NUMBER: VA 009 1421 8. Surface Disposal. (Complete Question 8 if sewage sludge from your facility is placed on a surface disposal site.) a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal dry metric tons b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal? Yes No If "No", answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary. c. Site name or number: d. Contact person: Phone: (_____) Contact is: Site Owner Site operator e. Mailing address: Street or P.O. Box: City or Town: _____ State: Zip: Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site: Permit Number: Type of Permit: 9. Incineration. (Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.) a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: _____ dry metric tons b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? ____ Yes ___ No If "No", answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary. c. Incinerator name or number: d. Contact person: Title: Phone: (_____) Contact is: ____ Incinerator Owner ____ Incinerator Operator e. Mailing address: Street or P.O. Box: _____ State: _____ Zip: _____ f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: dry metric tons g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing

MACI	LITY NAME:		VPDES PERMIT NUMBER: VA 009142
	of sewage sludge at the Permit Number:	Type of Permit:	
	isposal in a Municipal		
fa	ollowing information for	r each municipal solid waste lar	ty is placed on a municipal solid waste landfill. Provide the adfill on which sewage sludge from your facility is placed. If additional pages as necessary.)
a.	Landfill name: W	aste managem	ent Landfill
b.	. Contact person:	Breg Enterli	ne
	Title: Divisio	n Manager	
	Phone: (& 04))	549-0835 ²	
		andfill Owner Landfill	
c.	Mailing address:		
	Street or P.O. Box:	3714 Waste m	Janage Mout Way
	City or Town: <u> </u>	enns	ranagement Way State: VA zip: 23149
d.			· · · · · · · · · · · · · · · · · · ·
	Street or Route #:	Same	
	County:		
	City or Town:		State: Zip:
e.	Total dry metric tons 42 culled dry m		udge placed in this municipal solid waste landfill:
f.	å	n attachment, the numbers of all	federal, state or local permits that regulate the operation of this
	Permit Number:	Type of Permit:	
	_572	Landfill	
g.		the quality of materials dispose	he Virginia Solid Waste Management Regulation, 9 VAC 20-80- d in a municipal solid waste landfill?
h.	Does the municipal so Management Regulati	olid waste landfill comply with a ion, 9 VAC 20-80-10 et seq.?	l applicable criteria set forth in the Virginia Solid Waste Yes No
i.		or other container used to transpord?No	rt sewage sludge to the municipal solid waste landfill be
			scribe the route below and indicate the days of the week
	and time of the day se	wage sludge will be transported.	As needed, R+ 360 W.
	From Reed	Dillo. D+ 3 8 +	o Saluda, Rt. 17 to Glenns

Form Approved 1/14/99 OMB Number 2040-0086

FACILITY NAME AND PERMIT NUMBER: COULAD WW VA DO91421

ART A.	BASIC APPL	ICATION INF	ORMATION FOR ALL	APPLICANTS:	
II treatme	ent works mus	t complete ques	stions A.1 through A.8 of	this Basic Application information pa	acket.
.1. Facil	ity Information).			
Facili	ity name	Callao Waste	Water Facility		
Mailir	ng Address	P.O. Box 129 Heathsville, V	⁄irginia 22473		
Conta	act person	Sterling Lee I	Bowles		
Title		Operator			
Telep	ohone number	(804) 453-360	00		
	ty Address P.O. Box)	104 Harry Ho	gan Road, Callao, Virgir	nia 22435	
2. Appli	icant Informati	on. If the applic	ant is different from the abo	ove, provide the following:	
Applic	cant name	Northumberla	nd County		· · · · · · · · · · · · · · · · · · ·
Mailin	ng Address	P.O. Box 129 Heathsville, V			
Conta	act person	Kenneth D. E.	ades		
Title		County Admir	nistrator		
Telep	hone number	(804) 580-766	66		
	owner	<u> </u>	tor (or both) of the treatn operator arding this permit should b applicant	nent works? e directed to the facility or the applicant.	
B. Existi works	Ing Environme (include state-	ental Permits. P issued permits).	rovide the permit number o	of any existing environmental permits that	at have been issued to the treatment
NPDE	S <u>VA 0091</u> 4	121		PSD	
UIC		············			
RCRA L Collect each etc.).	ction System I	nformation. Pro	ovide Information on munici	Other palities and areas served by the facility, ection system (combined vs. separate) a	Provide the name and population of and its ownership (municipal, private
Name	•		Population Served	Type of Collection System	Ownership
Calla	0		400	Grinder-Forcemain	County
	Total non	ulation served	400		

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Callao WW VA 0091421

5. In	dian Country.	
a.	is the treatment works located in Indian Country?	
	Yes	
b.	Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flot through) Indian Country?	ows
	YesNo	
a١	ow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provid rerage daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month titriod with the 12th month of "this year" occurring no more than three months prior to this application submittal.	
a.	Design flow ratengd	
	Two Years Ago Last Year This Year	
b.		igd
C.		
		-
	bliection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the partribution (by miles) of each.	ercer
	Separate sanitary sewer 100 %	,
	Combined storm and sanitary sewer %	<u>,</u>
. Di	scharges and Other Disposal Methods.	
a.	Does the treatment works discharge effluent to waters of the U.S.? Yes No.	0
	If yes, list how many of each of the following types of discharge points the treatment works uses:	
	i. Discharges of treated effluent 1	
	ii. Discharges of untreated or partially treated effluent <u>0</u>	
	iii. Comblned sewer overflow points 0	····
	iv. Constructed emergency overflows (prior to the headworks)	
	v. Other	
b.	Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? If yes, provide the following for each surface impoundment: Location:	0
	Annual average daily volume discharged to surface impoundment(s) mgd	
	Is discharge continuous or intermittent?	
	To district the second	
C.	Does the treatment works land-apply treated wastewater? Yes No.	0
	If yes, provide the following for each land application site:	
	Location:	
	Number of acres:	
	Annual average daily volume applied to site: Mgd	
	Is land application continuous or intermittent?	
d.	Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? Yes No.	o

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Callao WW - VA 0091421

If transport is by a part	y other than the ap	plicant, provide	e:					
Transporter name:			·····					
Mailing Address:								······································
Contact person:								
Title:								
Telephone number:	***************************************						•	~
Name: Mailing Address:								
Mailing Address:								
Contact person:	·····	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~		······································			
Title:				*****		· · · · · · · · · · · · · · · · · · ·		
Telephone number:						·····		***************************************
If known, provide the N	PDES permit numb	ber of the treat	tment works tha	at receives this di	scharge.			
Provide the average da	ily flow rate from th	ne treatment w	orks into the re	ceiving facility.				_ mgd
Does the treatment wo A.8.a through A.8.d ab					ed in	Yes		_ No
If yes, provide the follo	wing for each dispo	osal method:						
Description of method	including location	and size of site	e(s) if applicable	e):				

Callao WW VA 0091421

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WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

) es	scription of Outfall.								
а	,	Outfall number	001							
b.		Location	Callao						22435	5
			(City or t Northun	own, if applicable oberland	e)				(Zip Co Virgin	ia
			-7(0		7.311	"	37	58' 2	(State)	390"
			(Latitude		, , , , ,	·····		Ju	(Longitu	ude)
C.		Distance from shore (ii	f applicable))			n/a	ft.		
d.		Depth below surface (i	if applicable	e)			n/a	ft.		
e.		Average daily flow rate		,			***************************************			
С.	•	Average daily now rate	7				.060	mga		
f.		Does this outfall have	either an ir	itermittent or a						
		periodic discharge?				Y	es _		N	lo (go to A.9.g.)
		If yes, provide the follo	wing inform	nation:						
		Number of times per ye	ear dischai	ge occurs:						
		Average duration of ea								
		Average flow per disch	narge:		********		***************************************		n	ngd
		Months in which discha	arge occurs	3:						•
g.		Is outfall equipped with	a diffuser	?		Y	es	V	 N	ło
•		, , ,			***************************************				······································	•
10. D	es	cription of Receiving	Waters.							
_		Name of receiving that	•	LITDID LAW	no Crook					
a.	•	Name of receiving water	er	UTRIB Lodg	ge Creek					
a. b.		Name of receiving water		UTRIB Lodg		mac - 1a				
		Name of watershed (If	known)		Poto					
			known)		Poto		/n):			
	•	Name of watershed (If	known) servation S	Service 14-dígí	Potor	code (if knov	m): omac			
b.	•	Name of watershed (If United States Soil Con Name of State Manage	known) servation S ement/Rive	Service 14-dígi r Basin (if knov	Potor t watershed	code (if knov	omac			
b.	•	Name of watershed (If United States Soil Con	known) servation S ement/Rive	Service 14-dígi r Basin (if knov	Potor t watershed	code (if knov	omac			
b. c.		Name of watershed (If United States Soil Con Name of State Manage	known) servation Sement/Rive cal Survey	Service 14-digi r Basin (if knov 8-digit hydrolog	Potor t watershed wn): gic catalogir	code (if knov	omac			
b. c.	•	Name of watershed (If United States Soil Con Name of State Manage United States Geologic	known) servation 5 ement/Rive cal Survey serving strea	Service 14-digi r Basin (if knov 8-digit hydrolog m (if applicable	Potor t watershed wn): gic catalogir	code (if knov <u>Pot</u> ng unit code (i	omac f known):	cfs		

Samples CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS. BIOCHEMICAL OXYGEN | BOD-5 mg/l mg/l 5210B AS mg/l DEMAND (Report one) CBOD-5 mg/l 5210B AS mg/l mg/l 3 9221E FECAL COLIFORM AS 41.6 mg/l 41.6 mg/l 2540D AS TOTAL SUSPENDED SOLIDS (TSS)

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE



Sterling Lee Bowles, III Attn: Lee Bowles P.O. Box 202 Reedville, VA 22539

Certificate of Analysis

10357 Old Heaton Phop ASHIGNA VINDERO 2300S Prione 804 550 3970 Fix 804 650 3328 +

Whotewater Plant

Callag Project Name :

Date Received: June 20, 2007 June 20, 2007 Date Sampled : Time Sampled : Date Issued :

10:00

June 28, 2007

Sample ID : Final Ef	fluent :		,	
Parameter	<u>Result</u>	TINCIES UL	Cate/Time Prepared	Date/Time
Parameter 80D TKN Fecal Collform E. Coll	\$40.2 BDL \$22	mg/1 2 1 mg/1 1 FW/100m1 2	96-20/1445 06-26/1330 06-20/1435 06-20/1430	Apalyzed Method Analyst 06-25/1310 5210 B R.R 06-27/1015 4500-NH3FMDM 05-23/1235 9221E SET 05-23/1230 9221E SET
				,
				*. :

BDL = Below Detection Limit All methods are 40 CFR 136 March 12, 2007, Table 18 approved. Reference to Standard Methods is 18th ed.

FOR ie EV Sisk Coordinator

R7673394-1



Sterling Lee Bowles, III Attn: Lee Bowles P.O. Box 202 Ruedville. VA 22539

Analytical Summary

10357 Old Keelen Rogo Authunid, Virginia 22005 Phone 804 550 3971 FOX 804 550 3826

Project Name : Callao Wastewater Plant Date Received: June 02, 2008

Date Received: Date Sampled: Time Sampled:

June 02, 2008

10:00

Nate Issued : June 10, 2008

Lab # 1(A-D)/Sample ID	E. Final	Effluent				
<u>Parameter</u>	Result	Units	_DL	Date/Time Precered	<pre>Date/Time</pre>	Method Analyst
CBOD TKN Fecal Coliform E. Coli TSS	1.6	mg/1 mg/1 CFU/100m CFU/100m mg/1	2 1 · 1 2	06-03/1430 06-05/1330 06-02/1525 06-02/1530 06-03/1530	06-08/1340 06-06/1040 06-05/1325 06-04/1340 06-04/0900	5210B SET 4500-NHBF KBT 9221E SET 9221B1 SET
				**		; ; ;

SDL = Below Detection Limit All methods are 40 GFR 136 March 12, 2007, Table 18 approved. Reference to Standard Methods is 18th cd.

Carrie E. Sisk Laboratory Manager

R8678896 - 1



medial mis - mian Til Impeas member F

Sterling Lee Bowles, III Attn: Lee Bowles .0, Box 202 eedville, VA 22539

ARRIYELER! Survery

19367 Old Keylon Pork Anhlonet, Virginia 23005 Mone 804 550 3971 . * 92 8C4 550 3826

Projec: Name Callac Wastewater Plant Date Raceived: June 23, 2008 Date Sampled: June 23, 2008

Date Sampled: June 23, 2008 Time Sampled: 10:00 Date Issued: June 30, 2008

Fab # 1(A-D)/Sample ID Final Effluent

E sa swale a p	Dan. 34	i makana	C :	TATATA TATA	- Date/Time	****
<u> </u>	Result	#g/1	<u> </u>	Prepared 06-24/1400	Analyzed 06-29/1240	Method Analyst
!KN	BOL	ng/1	1	06-24/0900		4500-NH3F: KET
fecal Colfform	< 2	CFi /1 00m1	` ¹ 2	06-23/1500	06-26/1355	
E. Coli	. 3	ACT VIOLEN	1	06-23/1500	06-25/1420	

BUN = Below Detection limit All bethods are 40 CFR 136 March 12, 2007, Table 13 approved. Reference to Standard Methods is 18th rd.

Carrio E. Sisk Laboratory Manager

RE679237-1

Primary Laboratories, Inc.

7423 Lee Davis Road • Mechanicsville, VA 23111 • Tele Hone (804) 559-9004 • Pax (804) 559-9306



ANALYTICAL LABORATORY REPORT

Calleo Treatment Plant Attn: Lee Bowles 104 Harryhogan Road Calleo, VA 22435

Date Received:

Date Sampled:

Work Order No.

0809005-01

Test	Final Effluent						
Description	Final Result	Reporting Limit	Units of Veasure	Method Numbers*	Date Analyzed	Time Analyzed	Tech
BOD	<5.0	5.0	rig/L	5210 B	4-Sep-08	7:50	NA.
TKN	0.5	0.5	mg/L	4500 N/NH ₃	9-Sep-08	13:30	NA:
TSS	<1.0	1.0	mg/L	2540 D	8-Sep-08	11:30	AS
Fecal Coliform	<2	2	IAPNU100mi	9221E	2-Sep-08	14:00	AS
E Coli	<3	2	IAPNVIOOMI	9221F	2-56p-08	14:00	AS:

^{*}All methods are from Standard Methods 18th Edition, unless otherwise noted.

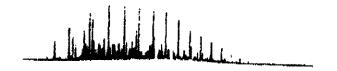
Parry L. Bragg

Laboratory Manager

These analytical results are based upon graterials provided by the oliest as it are intended for the exclusive use of the client. These analytical results represent the best judgement of Primery Laboratories, in : Primery Laboratories, inc. seaumes no responsibility, secrets of implied, as to the interpretation of the snelpholi moulds bonts in 8 in this report. This report is not to be reproduced encept with the written approved of Primary Laboratories, Inc.

Primary Laboratories, Inc.

7423 Lee Davis Road • Mechanicsville, VA 23111 • Telephone (804) 559-9004 • Pax (804) 559-9306



ANALYTICAL LABORATORY REPORT

22-Sep-08

Callao Treatment Plant Attn: Lee Bowles 104 Harryhogen Roed Calleo, VA 22435

Date Received: Date Sampled:

15-Sep-08

Work Order No:

15-Sec-08 0809109-01

Client ID: Test	Final Efficient C	Reporting	Units of	Method			
Description	Result	Undt	_ Manauro	Numbers*	Date Analyzed	Time Analyzed	Tech.
CBOD	<5.0	5.C	mø/L	6210 B	17-9ap-06	7:80	NA
TKN	<0.5	0.5	mg/) ,	4500 N/NH ₃	18-Sep-08	8:00	NA
TSS	<1.0	10	rrg/L	2540 D	16-Sep-08	12:00	AS
Pecal Coliform	42	2	A IPN/100mi	9221E	15-Sep-08	14:00	AS
E Coli	<2	2	NPN/100ml	9221F	15-Sep-08	14:00	AS

[&]quot;All methods are from Standard Methods toth Edi ion, unless otherwise noted.

Laboratory Manager

Date: 9/20/08

Those analytical results are based upon respected provided by the allest on one intended for the exclusive use of the offent. These analytical results represent the best judgement of Primary Laboratories, 110 Primary Laboratories. Sec. sessures to responsibility, express or implied, so in the interpretation of the emphisor counts earlied to 14° into report. The report is not to be reproduced except with the written approval of Primary Laboratories, inc.



Sterling Lee Bowles, III
Attn: Lee Bowles
P.O. Box 202
Reedville, VA 22539

Certificate of Analysis

10387 Old Retton Podd Ashrons, Virginic 23005 . Phone 804 350 3971 Fax 904 650 3626

Project Name Date Received Date Sampled Callao Wastewater Plant June 05, 2007 June 05, 2007

Time Sampled : Date Issued :

10:00 June 20, 2007

Lab # 1/Sample 10 :	Final Effluer		
Parameter	Regult Install	Date/Time: Date/Time Prepared Analyzed Method	<u>Analyst</u>
CBOO TKN TSS	\$ 2 \$0 \$1.0 \$1.0	06-26/1500 06-11/1415 52108 06-12/1000 06-12/1415 4500-N 06-11/0915 06-12/0830 2540 D	R.R H3fMDM
Lab # 2/Sample ID :	Final Effluem Result Hillits (0)	Date/Time Date/Time Prepared Analyzed Method	Ada lyst
Fecal Coliform E Coli	S 2 MPN 100ml 2 2 MPN 150ml 2	06-06/1445 06-08/1350 9221E 06-06/1445 06-08/1355 9221E	SET

BDL = Below Detection Limit All methods are 40 CFR 136 March 12, 2017, Table IB approved. Reference to Standard Methods is 18th el.

Carrie E. Sisk CA Coordinator

R7673113-1

Form Approved 1/14/99 OMB Number 2040-0086

Callao	WW	VA	0091	421

BA	SIC APPLICATION INFORMATION
PAR	T B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).
All a	pplicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).
B.1.	inflow and infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.
	Briefly explain any steps underway or planned to minimize inflow and infiltration.
B.2.	Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)
	a. The area surrounding the treatment plant, including all unit processes.
	b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
	c. Each well where wastewater from the treatment plant is injected underground.
	d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.
	e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
	f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.
B.3.	Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chiorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.
B.4.	Operation/Maintenance Performed by Contractor(s).
	Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?YesNo
	If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).
	Name:
	Mailing Address:
	Telephone Number:
	Responsibilities of Contractor:
	Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)
	a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.
	b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies. YesNo

FACILITY NAME AND PERMIT NUMBER:				**************************************	Form Approved 1/14/99 OMB Number 2040-0086			
c If the answer to B.5	If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).							
	provements plan	ned independen	tly of local, State			nentation steps listed planned or actual com		
		Schedule	А	ctual Completio	n			
Implementation Sta	Implementation Stage MM / I		<u> </u>	M / DD / YYYY				
- Begin construction	- Begin construction							
- End construction	- End construction							
- Begin discharge	- Begin discharge							
- Attain operationa	l level			_//				
	** **	•			מני נוני ו		A. 1.	
e. Have appropriate p		-				Yes	_No	
Describe briefly: _			, · · · · · · · · · · · · · · · · · · ·					
_								
B.6. EFFLUENT TESTING D	ATA (GREATE	R THAN O.1 MG	D ONLY).					
Applicants that discharge testing required by the overflows in this sectlor methods. In addition, to standard methods for a pollutant scans and mu	permitting authors. All Information his data must conallytes not add	ority <u>for each outf</u> n reported must omply with QA/Q ressed by 40 CF	all through which be based on dat C requirements of R Part 136. At a	n effluent is disc a collected throu of 40 CFR Part	<u>charged.</u> Do not ugh analysis con 136 and other ap	include information or ducted using 40 CFR propriate QA/QC requ	combined sewer Part 136 Urements for	
Outfall Number:								
POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE					
	Conc.	Units	Conc.	Units	Number of Samples	ANALYTICAL METHOD	ML / MDL	
CONVENTIONAL AND NON	CONVENTIONA	L COMPOUNDS						
AMMONIA (as N)			T					
CHLORINE (TOTAL RESIDUAL, TRC)								
DISSOLVED OXYGEN								
TOTAL KJELDAHL NITROGEN (TKN) NITRATE PLUS NITRITE								
NITROGEN OIL and GREASE		<u> </u>	-					
PHOSPHORUS (Total)								
TOTAL DISSOLVED SOLIDS (TDS)		A PARTICIPATION OF THE PARTICI						
OTHER								
REFER TO THE A	PPLICATION		END OF PAILED TO D		E WHICH C	THER PARTS	OF FORM	

2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:	Form Approved 1/14/99 OMB Number 2040-0086			
BASIC APPLICATION INFORMATION				
PART C. CERTIFICATION				
All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.				
indicate which parts of Form 2A you have completed and are submitting:				
X Basic Application Information packet Supplemental Application	Information packet:			
Part D (Expanded	l Effluent Testing Data)			
Part E (Toxicity T	esting: Biomonitoring Data)			
Part F (Industrial	User Discharges and RCRA/CERCLA Wastes)			
Part G (Combined	d Sewer Systems)			
ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.				
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.				
Name and official title Senneth D. E.a.	des, County Administrator			
Signature XMUTE COUNTY				
Telephone number 804 - 580 - 7666				
Date signed 12/3/08				
Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.				

SEND COMPLETED FORMS TO:

Item 5. Topographic Maps

The sludge will be generated at Callao and filtered at Reedville. Therefore maps of each location are enclosed.

There are believed to be wells at the residences nearby the Reedville facility and one on the facility property.

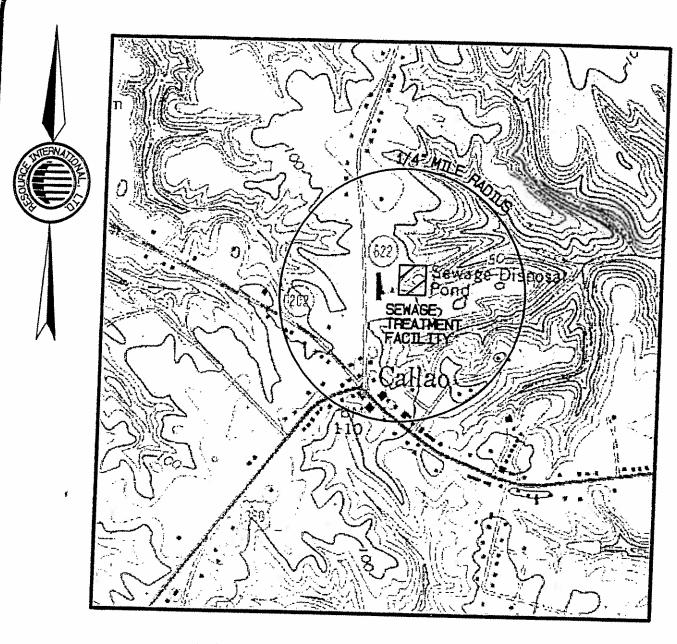
At Callao, most water is supplied by private water companies. There is a well in use at the former school for that property. Other water bodies are shown on the drawings. There may be springs or seeps on the creeks downstream of the Callao discharge.

Item 6. Sludge Handling Narrative:

Sludge generated within the packaged treatment plant at Callao will be first pumped into an aerated digester chamber where it will be digested. It will then be pumped or vacuumed into tanker trucks of approximately 2,000 gallon capacity and hauled to the Reedville Wastewater Treatment Facility. At Reedville, it will be pumped directly onto filter beds, or into the digester tank at that location. The dried solids from the filter beds will be hauled to the Waste Management Landfill in Glenns, Virginia, along with the sludge from the Reedville facility. Aerobic digestion is utilized for both pathogen reduction and vector attraction reduction will be demonstrated by option 3, a bench scale demonstration.

Line drawings of the Callao and Reedville Facilities are enclosed.

LODGE CREEK



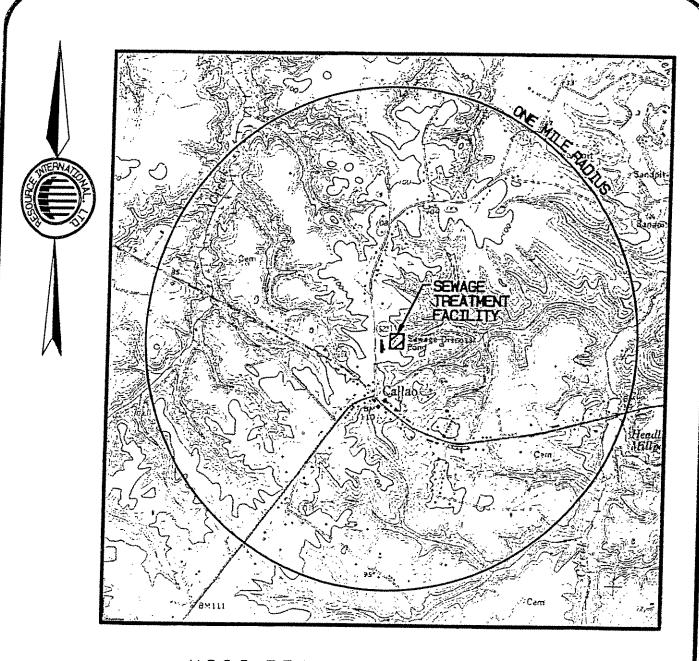
U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES CALLAO, VA SCALE: 1" - 1,000'

FIGURE 2
VICINITY MAP
CALLAO WWTP
NORTHUMBERLAND COUNTY
AUGUST 2003



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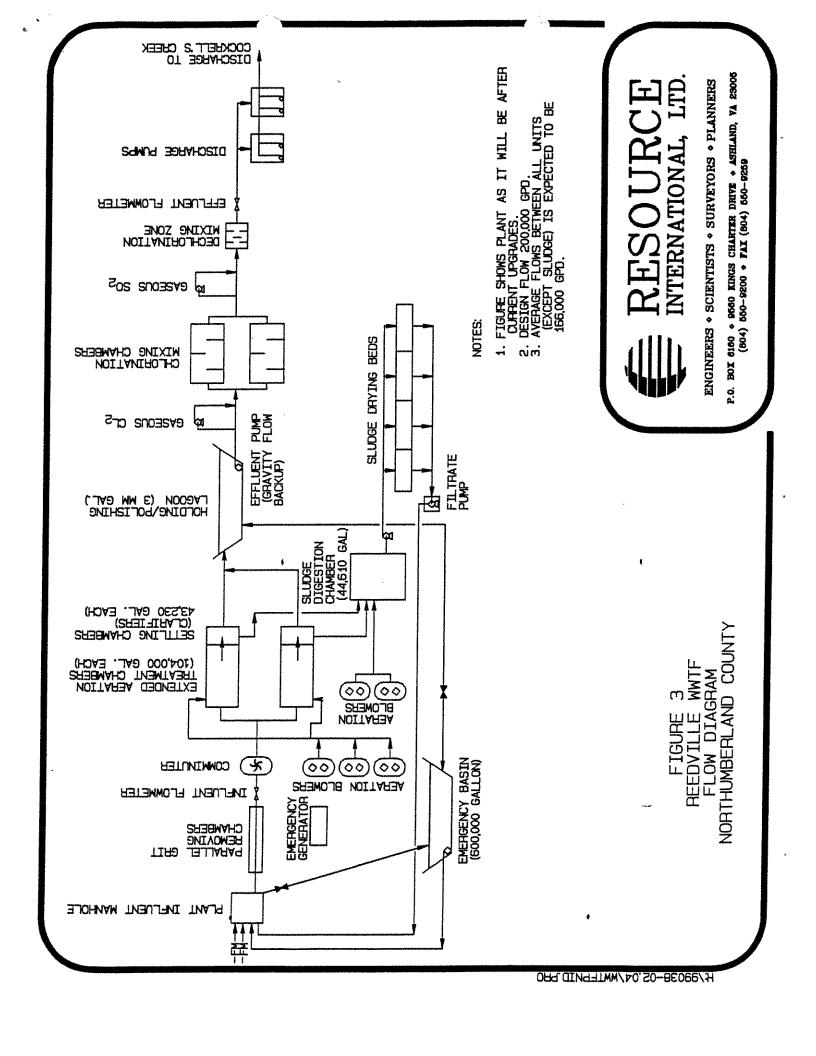
U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES CALLAO, VA SCALE: 1" - 2,000'

FIGURE 1
VICINITY MAP — EXTENDED
CALLAO WWTP
NORTHUMBERLAND COUNTY
AUGUST 2003

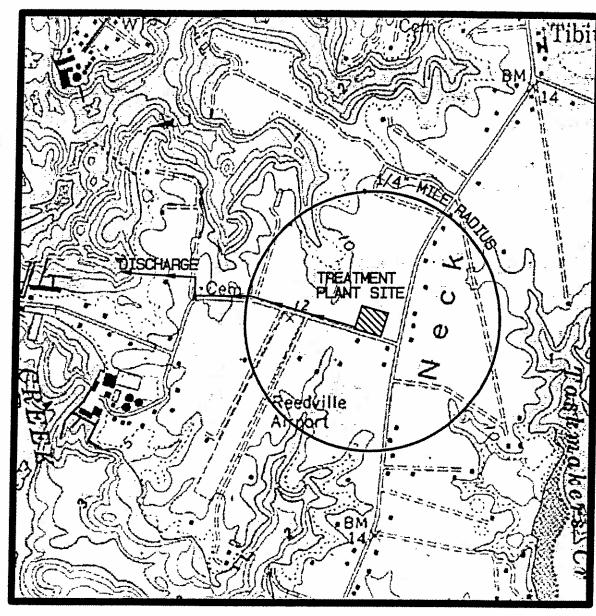


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U.S.G.S. 7.5 MINUTE SERIES QUADRANGLE REEDVILLE, VA SCALE: 1" = 1,000'

NOTES:

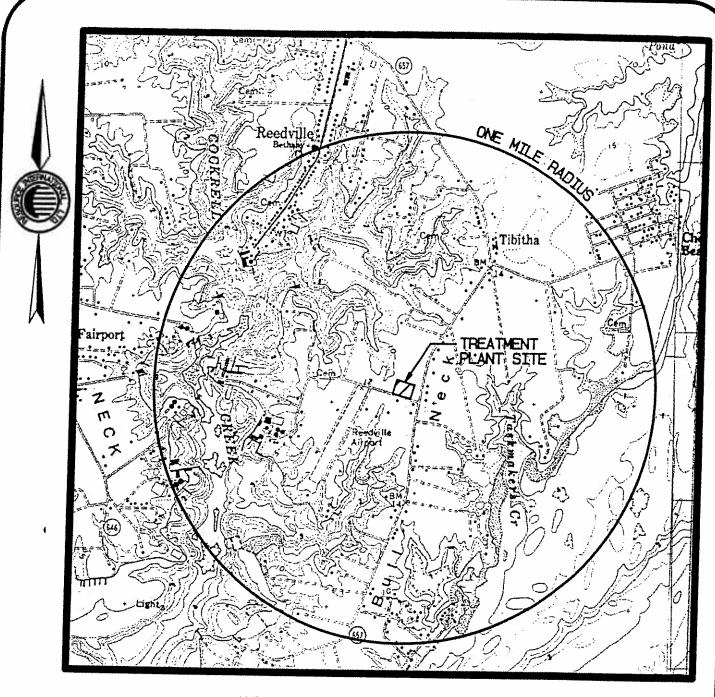
- 1. WELLS EXIST AT THE RESIDENCES WITHIN 1/4 MILE OF PLANT AS SHOWN ABOVE. ONE WELL EXISTS ON PLANT SITE.
- 2. NO SPRINGS ARE KNOWN TO EXIST.
- 3. OTHER WATER BODIES ARE SHOWN IN BLUE.

FIGURE 1
VICINITY MAP
NORTHUMBERLAND COUNTY
WASTEWATER TREATMENT FACILITY



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U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES REEDVILLE, VA. AND EAST OF REEDVILLE, VA. SCALE: 1" = 2,000'

FIGURE 2
VICINITY MAP - EXTENDED
NORTHUMBERLAND COUNTY
WASTEWATER TREATMENT FACILITY



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Mosca, Denise

From: Palmore, Jennifer

Sent: Friday, March 27, 2009 11:13 AM

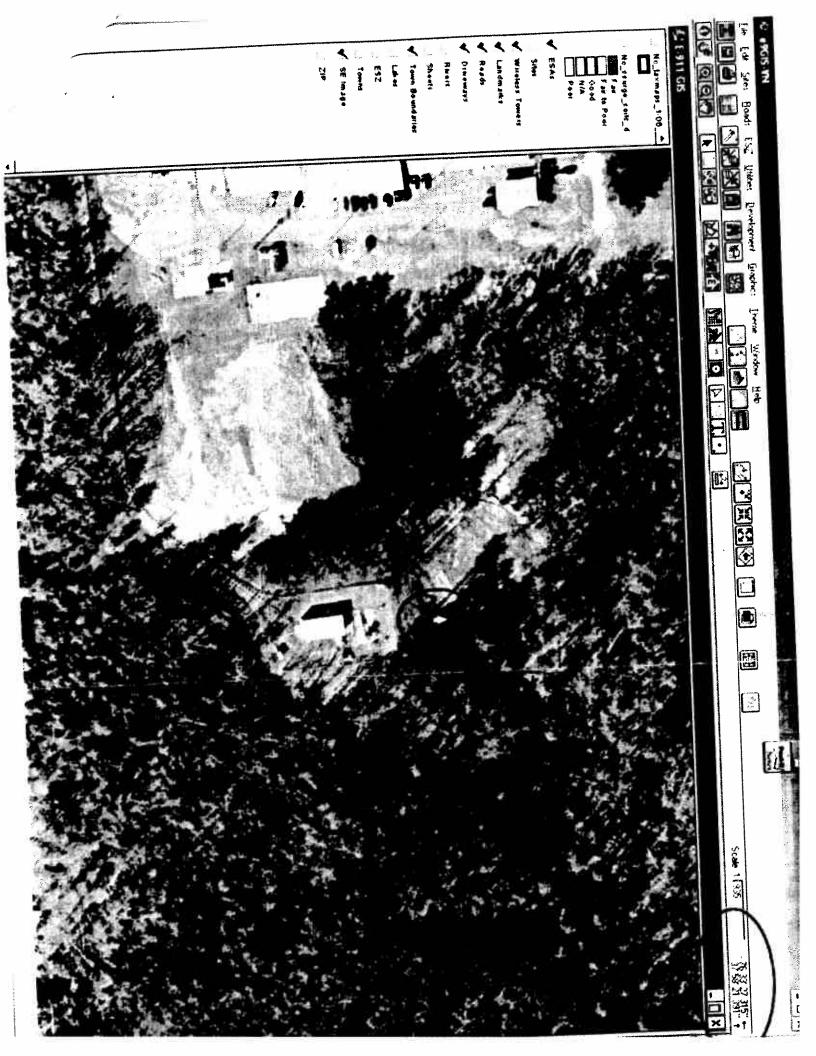
To: Mosca, Denise

Subject: Lat-long

You sent me the DEQ lat-long, and their map, but not the lat-long that they submitted. Could you please send that? The map is very, very close to what I have had for them. The lat-long in CEDS is pretty far off and I am not sure where that came from. Based on the map it is approximately 37 58 21, -76 33 27, but would like to see what they had if you could. Thanks.

Thanks.

Jennifer V. Palmore, P.G. Senior Environmental Engineer Dept. of Environmental Quality Piedmont Regional Office 49.49 A Cox Road Glen Aflen, V V 23060 (804) 527-5058 (804) 527-5106 (fax)





MEMORANDUM

TO:

DENISE MOSCA

FROM:

KENNETH D. EADES, COUNTY ADMINISTRATOR.

SUBJECT:

CALLAO WWTP APPLICATION

DATE:

12/17/2008

Enclosed is the application to renew our VPDES Permit for the Callao Wastewater Plant. Please let us know if you need additional information.

Thank you

SUPERVISORS

Ronald L. Jett, Chairman Heathsville, VA 22473 District V

Richard F. Haynie. Vice-Chairman Heathsville, VA 22473 District II

A. Joseph Self, Sr. Callao, VA 22435 District I

James M. Long Wicomico Church, VA 22579 District III

Thomas H. Tomfin Wicomico Church, VA 22579 District IV



Northumberland County, Virginia

Board of Supervisors

P.O. Box 129 • 72 Monument Place Heathsville, Virginia 22473

December 17, 2008

Ms. Denise Mosca Department of Environmental Quality Piedmont Regional Office 4949-A Cox Road Glen Allen, Virginia 23060

RE: VPDES Permit VA0091421, Survey Form Results

Dear Ms. Mosca:

The letter is written to summarize industrial pretreatment survey (special condition No. 11).

Mr. Clifton Lee Bowles stated that only 3 locations within the Callao area that are on sewer have to be treated with degreaser once a month. Those locations are Callao Dairy Freeze, Callao Supermarket and Callao Apartments. The Callao Dairy Freeze and the Callao Supermarket are both equipped with grease traps and are being used. Mr. Bowles stated that this is a very small problem and not one to cause any further problems.

If you have any questions regarding this issue, please don't hesitate to ask.

Sincerelly,

Kenneth D. Eades County Administrator

COUNTY ADMINISTRATOR

Kenneth D. Eades Heathsville, VA 22473 804-580-7666 (Voice-804-580-7053 Fax) keades@co.northumberland.va.us

COUNTY ATTORNEY

W. Leslie Kliduff, Jr. 804-435-0851 (Voice) 804-435-0551 (Fax)

PUBLIC NOTICE BILLING INFORMATION FORM

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290. C. 2.

Agent/Department to be billed:

Agent/Department to be billed:	Northumberland Santary District
Owner:	Northumberland
Applicant's Address:	Kenneth P. Eades
	P.O. Box 129
	Heathsville, VA 22473
Agent's Telephone No:	804-580-7666
Authorizing Agent:	Signature Signature
Facility Name:	Callao WWTP
Permit No:	VA0091421

Please return to:

Denise Mosca DEQ – Piedmont Regional Office 4949 A-Cox Road Glen Allen, VA 23060 804-527-5027

Fax Number: 804-527-5106

VPDES Permit Application Addendum
1. Entity to whom the permit is to be issued: Nopthumber land. Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
2. Is this facility located within city or town boundaries? Y/N
 3. Provide the tax map parcel number for the land where the discharge is located. \$\begin{align*} - \left - 4 \left \right \$ 4. For the facility to be covered by this permit, how many acres will be disturbed during the next fine years due to new construction activities? \(\right) \right \right \right \$
5. What is the design average effluent flow of this facility? MGD For industrial facilities, provide the max. 30-day average production level, include units:
In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y/N If "Yes", please identify the other flow tiers (in MGD) or production levels:
Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?
6. Nature of operations generating wastewater: Residential - Commercial
77 % of flow from domestic connections/sources Number of private residences to be served by the treatment works:
23_% of flow from non-domestic connections/sources
7. Mode of discharge: X Continuous Intermittent Seasonal Describe frequency and duration of intermittent or seasonal discharges:
8. Identify the characteristics of the receiving stream at the point just above the facility's discharge point: Permanent stream, never dry Intermittent stream, usually flowing, sometimes dry Ephemeral stream, wet-weather flow, often dry Effluent-dependent stream, usually or always dry without effluent flow Lake or pond at or below the discharge point Other:
9. Approval Date(s): O & M Manual Nov. 1, 2006 Sludge/Solids Management Plan Nov. 1, 2006
Have there been any changes in your operations or procedures since the above approval dates? Y N

VPDES Permit Manual – Section L Revised Last: June 15, 2007 FACILITY NAME: Callao WWTP

VPDES PERMIT NUMBER: VA 0091421

SECTION A. GENERAL INFORMATION

All applicants must complete this section.

ì	a. b.	Facility name: Callan Waste Water Treatment Facility Contact person: Sterling Lee Bowlos III						
	b.	Contact person: Sterling Lee Bowlos III						
,		Contact person: Sterling Lee Bowlos III						
,		Title: Plant Manager						
•		Phone: (804) 580-76666 or 804-453-3600						
	c.	Mailing address:						
		Street or P.O. Box 129						
		City or Town: HeathSville State: VA Zip: 22473						
	d.	Facility location:						
		Street or Route #: 104 Harryhogan Rd. County: Northumberland						
		County: Northumberland						
		City or Town: Callab State: VA Zip: 22435						
	e.	Is this facility a Class I sludge management facility?YesNo						
	f.	Facility design flow rate: mgd						
	g.	Total population served:						
	h.	Indicate the type of facility:						
		Publicly owned treatment works (POTW)						
		Privately owned treatment works						
		Federally owned treatment works						
		Blending or treatment operation						
		Surface disposal site						
		Other (describe):						
2.	Ap	plicant Information. If the applicant is different from the above, provide the following:						
	a.	Applicant name: Northumberland County						
	b.	Mailing address:						
		Street or P.O. Box: P.O. Box 129						
		City or Town: Heathsville State: VA Zip: 22473						
	c.	Contact person: Kenneth D. Eades						
		Title: County Administrator						
		Phone: (804) 580 - 7666						
	d.	Is the applicant the owner or operator (or both) of this facility?						
		owner operator						
	e.	Should correspondence regarding this permit be directed to the facility or the applicant? applicant						
3.	Par	mit Information.						
	a.	Facility's VPDES permit number (if applicable): VA 0091421						
	b.							
	υ,	for that regulate this facility's sewage sludge management practices:						
		Permit Number: Type of Permit:						

1 .	CILITY NAME: Callo WWTP VPDES PERMIT NUMBER: VA 009145 Indian Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this facility occur in Indian Country? Yes No 1f "Yes", describe:				
5.	Topographic Map. Provide a topographic map or maps (or other appropriate maps if a topographic map is unavailable) that shows the following information. Maps should include the area one mile beyond all property boundaries of the facility:				
	a. Location of all sewage sludge management facilities, including locations where sewage sludge is generated, stored,				
	 treated, or disposed. Location of all wells, springs, and other surface water bodies listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries. 				
5.	Line Drawing. Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.				
	Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation				
7.					
7.	Contractor Information. Are any operational or maintenance aspects of this facility related to sewage sludge generation treatment, use or disposal the responsibility of a contractor? Yes No If "Yes", provide the following for each contractor (attach additional pages if necessary).				
7.	treatment, use or disposal the responsibility of a contractor?YesXNo				
7.	treatment, use or disposal the responsibility of a contractor?YesXNo If "Yes", provide the following for each contractor (attach additional pages if necessary).				
7.	treatment, use or disposal the responsibility of a contractor?YesXNo If "Yes", provide the following for each contractor (attach additional pages if necessary). Name: Mailing address:				
7.	treatment, use or disposal the responsibility of a contractor?YesXNo If "Yes", provide the following for each contractor (attach additional pages if necessary). Name: Mailing address: Street or P.O. Box:				
7.	treatment, use or disposal the responsibility of a contractor?YesXNo If "Yes", provide the following for each contractor (attach additional pages if necessary). Name: Mailing address:				
7.	treatment, use or disposal the responsibility of a contractor?YesXNo If "Yes", provide the following for each contractor (attach additional pages if necessary). Name: Mailing address: Street or P.O. Box: City or Town:				

8. Pollutant Concentrations. Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants which limits in sewage sludge have been established in 9 VAC 25-31-10 et seq. for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE DATE	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
Arsenic	NA			
Cadmium	\ //			
Chromium	* //			
Copper	× 0			
Lead	C\$ 1/			
Mercury	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
Molybdenum	\\ (/			
Nickel	N 11			
Selenium	× 4			
Zinc	\\ //			

FACILITY NAME: Callas WWTP VPDES PERMIT NUMBER: VA 0091421 9. Certification. Read and submit the following certification statement with this application. Refer to the instructions to determine who is an officer for purposes of this certification. Indicate which parts of the application you have completed and are submitting: Section A (General Information) Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge) Section C (Land Application of Bulk Sewage Sludge) Section D (Surface Disposal) "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." P. Eades , County Administrator

Date Signed 12/3/08 Name and official title

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

Telephone number (804)

FACILITY NAME: Callad WWTP VPDES PERMIT NUMBER: VH 009 1421

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

	Total dry metric tons per 365-day period generated at your facility: 2.3 dry metric tons			
dis	unt Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or sal, provide the following information for each facility from which sewage sludge is received. If you receive sewage from more than one facility, attach additional pages as necessary.			
a.	Facility name: \mathcal{N}/\mathcal{A}			
b.	Contact Person:			
	Title:			
	Phone: ()			
c.	Mailing address:			
	Street or P.O. Box:			
	City or Town: Zip:			
d.	Facility location:			
	(not P.O. Box)			
e.	Total dry metric tons per 365-day period received from this facility: dry metric tons			
f.	Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:			
Tr	reatment Provided at Your Facility. Which class of pathogen reduction is achieved for the sewage sludge at your facility?			
	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown			
a.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Digestion			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Aerobic Digestion			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Which vector attraction reduction option is met for the sewage sludge at your facility?			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class AClass BNeither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Which vector attraction reduction option is met for the sewage sludge at your facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration)			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Which vector attraction reduction option is met for the sewage sludge at your facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration)			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Which vector attraction reduction option is met for the sewage sludge at your facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge)			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class AClass BNeither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Which vector attraction reduction option is met for the sewage sludge at your facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5)			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class A Class B Neither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Which vector attraction reduction option is met for the sewage sludge at your facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) Option 7 (75 percent solids with no unstabilized solids)			
a. b.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class AClass BNeither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:Aerobic CDigestion Which vector attraction reduction option is met for the sewage sludge at your facility? Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) Option 7 (75 percent solids with no unstabilized solids) Option 8 (90 percent solids with unstabilized solids) None or unknown			
a. b. c.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class AClass BNeither or unknown Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:			

FA	CIL	ITY NAME:	Callao	WWTP	vpdes permit number: <u>VA 0091</u> 42\
4.				eting Ceiling and Po on Options 1-8 (EQ	ollutant Concentrations, Class A Pathogen Requirements and Sludge).
	(If s	sewage sludge f	from your facility	does not meet all oj	f these criteria, skip Question 4.)
	a.	ווי	ic tons per 365-da _ dry metric to n s	ay period of sewage s	sludge subject to this section that is applied to the land:
	b.	Is sewage slud	~ .	section placed in bag	gs or other containers for sale or give-away?
5.	Sale	e or Give-Away	y in a Bag or Ot	her Container for A	pplication to the Land.
				e sewage sludge in a wage sludge is cove	bag or other container for sale or give-away prior to land red in Question 4.)
	a.		-		sludge placed in a bag or other container at your facility for
		sale or give-aw	vay for applicatio	n to the land: N/P	dry metric tons
	b.	•	* *	copy of all labels or r r for application to th	notices that accompany the sewage sludge being sold or given be land.
6.	Shi	pment Off Site	for Treatment	or Blending.	
	(Complete this question if sewage sludge from your facility is sent to another facility that provides treatment or blending. This question does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this question if the sewage sludge is covered in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional sheets as necessary.)			re sent directly to a land application or surface disposal site. restions 4 or 5. If you send sewage sludge to more than one	
	a.				Daste water Treatment Facility
	b.	Facility contac	t: Sterl	ing lee E	sowles, III
		Title:	ant m	nanager	
				- 3600 -	804-529-6108
	C.	Mailing addres		~	
				Box 129	
				•	State: <u>VA</u> Zip: <u>22473</u>
	d.	Total dry metr	c tons per 365-d dry metric tons	ay period of sewage:	sludge provided to receiving facility:
	e.	federal, state of Permit Number	or local permits ther: Type	at regulate the receive of Permit:	ility's VPDES permit number as well as the numbers of all other ring facility's sewage sludge use or disposal practices:
	f.	Does the recei			ent to reduce pathogens in sewage sludge from your facility?
			f pathogen reduct Clas		ne sewage sludge at the receiving facility? her or unknown
				. 1	treatment processes used at the receiving facility to reduce
		pathogens in s	ewage sludge:	NIA	
	g.	sludge?	Yes No	0	the sewage sludge at the receiving facility?
			· · ·	ocess, with bench-sca	

	Option 3 (Aerobic process, with bench-scale demonstration) VPDES PERMIT NUMBER: VA 009 142
	Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
	Option 5 (Aerobic processes plus raised temperature)
	Option 6 (Raise pH to 12 and retain at 11.5)
	Option 7 (75 percent solids with no unstabilized solids)
	Option 8 (90 percent solids with unstabilized solids)
	None unknown
	Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge:
	Does the receiving facility provide any additional treatment or blending not identified in f or g above?
	Yes No
	If "Yes", describe, on this form or another sheet of paper, the treatment processes not identified in f or g above:
	If you answered "Yes" to f, g or h above, attach a copy of any information you provide to the receiving facility to comply with the "notice and necessary information" requirement of 9 VAC 25-31-530.G.
	Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away for application to the land? YesNo
	If "Yes", provide a copy of all labels or notices that accompany the product being sold or given away.
•	Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally used for such purposes? Yes No. If "No", provide description and specification on the vehicle used to transport the sewage sludge to the receiving facility.
	Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the week
	and the times of the day sewage sludge will be transported. RTS 6225. to R+ 360, E.
	to R+ 657, S. to R+ 659 to plant, one or two truck
	permonth, during week day, any time of day
aı	nd Application of Bulk Sewage Sludge.
Со	omplete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in estions 4, 5 or 6. Complete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)
	Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:
	Do you identify all land application sites in Section C of this application? Yes No
	If "No", submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in accordance with the instructions).
	Are any land application sites located in States other than Virginia? Yes No
	If "Yes", describe, on this form or on another sheet of paper, how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.
i.	Attach a copy of any information you provide to the owner or lease holder of the land application sites to comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples may be obtained in Appendix IV).

7.

FACILITY NAME: Callan WWTP VPDES PERMIT NUMBER: VH 009 1421 8. Surface Disposal. (Complete Ouestion 8 if sewage sludge from your facility is placed on a surface disposal site.) a. Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal sites: NA dry metric tons b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal? ____ Yes ____ No If "No", answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one surface disposal site, attach additional pages as necessary. c. Site name or number: d. Contact person: Phone: () Contact is: Site Owner Site operator e. Mailing address: Street or P.O. Box: State: Zip: Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surface disposal site: _____ dry metric tons List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface disposal site: Permit Number: Type of Permit: Incineration. (Complete Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.) a. Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewage sludge incinerator: _____ dry metric tons b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? _____ Yes _____ No If "No", answer questions c - g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary. c. Incinerator name or number: d. Contact person: Phone: (_____) _____ Contact is: Incinerator Owner _____ Incinerator Operator e. Mailing address: Street or P.O. Box: f. Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge incinerator: _____ dry metric tons g. List on this form or an attachment the numbers of all other federal, state or local permits that regulate the firing

FACILITY NAME: (alla wwtp			VPDES PERMIT NUMBER: VA 0091421		
		of sewage sludge at this incinerator: Permit Number: Type of Permit:			
10.	Dis	isposal in a Municipal Solid Waste Landfill.			
	foll	Complete Question 10 if sewage sludge from your facility is placed llowing information for each municipal solid waste landfill on whowage sludge is placed on more than one municipal solid waste lan	ich sewage sludge from your facility is placed. If		
	a.	V	and filu		
	b.	Contact person: Brea Enter line			
		Title: Division Manager			
		Phone: (<u>\$04</u>) <u>549 - 0835 </u>			
		Contact is: X Landfill Owner Landfill Operator			
	c.	Mailing address:			
		Street or P.O. Box: 3714 Waste many	as mout way		
		Street or P.O. Box: 3714 Waste Maria City or Town: Menns	tate: VA Zip: 23149		
	d.		·		
		Street or Route #: Same			
		Street or Route #: Same County:			
		City or Town:			
	e.	and the state of t			
		UNK no wndry metric tons			
	f.	List, on this form or an attachment, the numbers of all federal, stamunicipal solid waste landfill:	te or local permits that regulate the operation of this		
		Permit Number: Type of Permit:			
		572 Sandfill			
	g.	Does sewage sludge meet applicable requirements in the Virginia 10 et seq., concerning the quality of materials disposed in a muni Yes No	Solid Waste Management Regulation, 9 VAC 20-80-cipal solid waste landfill?		
	h.	Does the municipal solid waste landfill comply with all applicable Management Regulation, 9 VAC 20-80-10 et seq.? Yes	e criteria set forth in the Virginia Solid WasteNo		
	ì.	Will the vehicle bed or other container used to transport sewage watertight and covered? Yes No	sludge to the municipal solid waste landfill be		
		Show the haul route(s) on a location map or briefly describe the	oute below and indicate the days of the week		
		and time of the day sewage sludge will be transported. As re From Reedville, Rt 3 8. to Sall			

FACILITY NAME AND I	PERMIT NUMBER:
Callaniolo	VA 0091421

BASIC APPLICATION INFORMATION

PAF	T A. BASIC APPL	ICATION INFO	RMATION FOR ALL A	PPLICANTS:		
kli tı	eatment works must	complete questi	ons A.1 through A.8 of th	nis Basic Application Information pac	ket	
۱.1.	Facility Information	i.				
	Facility name	Callao Waste V	Vater Facility			
	Mailing Address	P.O. Box 129 Heathsville, Vir				
	Contact person	Sterling Lee Bo	wles			
	Title	Operator				
	Telephone number	(804) 453-3600)			
	Facility Address (not P.O. Box)	104 Harry Hog	an Road, Callao, Virgini	ia 22435		
1.2 .	Applicant Informati	ion. If the applica	nt is different from the above	ve, provide the following:		
	Applicant name	Northumberlan	d County			
	Mailing Address	P.O. Box 129 Heathsville, Vi				
	Contact person	Kenneth D. Ea	des			
	Title	County Admini	strator			
	Telephone number	(804) 580-766	5			
	is the applicant the	owner or operat	or (or both) of the treatm	ent works?		
	owner		operator			
		respondence rega		e directed to the facility or the applicant.		
	facility		applicant			
¥.3.	Existing Environme works (include state		ovide the permit number o	f any existing environmental permits that	at have been issued to the treatment	
			,	PSD		
	1410			O.W		
				04		
A.4.						
	Name		Population Served	Type of Collection System	Ownership	
	Callao		400	Grinder-Forcemain	County	
	, , , , , , , , , , , , , , , , , , ,					
	Total no	pulation served	400			

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Callao WW VA 0091421

Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually fithrough) Indian Country? Yes		ne treatment works located in Indian Con Yes Vo	•					
through) Indian Country? Yes No Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide average daily flow rate and maximum daily flow rate for each of the last three years. Each years data must be based on a 12-month period with the 12th month of *this year* occurring no more than three months prior to this application submittal. a. Design flow rate			ceiving water that is eith	ner in Indian Country	r or that is ups	tream from	า (and eventually	flows
Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also prowl average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month period with the 12th month of "this year' occurring no more than three months prior to this application submittal. a. Design flow rate	hrot	ough) Indian Country?			,			
b. Annual average daily flow rate		Yes No						
b. Annual average dally flow rate	age	e daily flow rate and maximum daily flow	v rate for each of the last	t three years. Each	year's data m	ust be base	andle). Also pro ed on a 12-montl	vide th h time
Two Years Ago)esi	sign flow rate .060 mad						
b. Annual average daily flow rate			Two Years Ago	<u>Last Year</u>		This Ye	<u>ar</u>	
Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the contribution (by miles) of each. Separate sanitary sewer Combined storm and sanitary sewer Discharges and Other Disposal Methods. a. Does the treatment works discharge effluent to waters of the U.S.? If yes, list how many of each of the following types of discharge points the treatment works uses: i. Discharges of treated effluent ii. Discharges of untreated or partially treated effluent iii. Combined sewer overflow points iv. Constructed emergency overflows (prior to the headworks) v. Other D. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? If yes, provide the following for each surface impoundment: Location: Annual average daily volume discharged to surface impoundment(s) Is discharge continuous or intermittent? C. Does the treatment works land-apply treated wastewater? If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Mgd Is land application continuous or intermittent?	۱nn	nual average daily flow rate			.0100			mgd
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Separate sanitary sewer 100 Combined storm and sanitary sewer 100 Discharges and Other Disposal Methods. a. Does the treatment works discharge effluent to waters of the U.S.? Yes If yes, list how many of each of the following types of discharge points the treatment works uses: i. Discharges of treated effluent 0 iii. Discharges of untreated or partially treated effluent 0 iii. Combined sewer overflow points 0 v. Other 0 Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? Yes If yes, provide the following for each surface impoundment: Location: Annual average daily volume discharged to surface impoundment(s) mgd Is discharge continuous or intermittent? C. Does the treatment works land-apply treated wastewater? Yes If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Mgd Is land application continuous or intermittent?								
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i. Discharges of treated effluent ii. Discharges of untreated or partially treated effluent iii. Combined sewer overflow points iv. Constructed emergency overflows (prior to the headworks) v. Other b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? If yes, provide the following for each surface impoundment: Location: Annual average daily volume discharged to surface impoundment(s) Is discharge continuous or intermittent? c. Does the treatment works land-apply treated wastewater? If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Mgd Is land application continuous or intermittent?					orks uses		***************************************	-
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iii. Combined sewer overflow points iv. Constructed emergency overflows (prior to the headworks) v. Other		· ·	ated effluent					
iv. Constructed emergency overflows (prior to the headworks) v. Other b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? If yes, provide the following for each surface impoundment: Location: Annual average daily volume discharged to surface impoundment(s) Is discharge continuous or intermittent? c. Does the treatment works land-apply treated wastewater? If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Mgd Is land application continuous or intermittent?		•	, a,oo omwork				^	
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impoundments that do not have outlets for discharge to waters of the U.S.? If yes, provide the following for each surface impoundment: Location: Annual average daily volume discharged to surface impoundment(s) Is discharge continuous or intermittent? c. Does the treatment works land-apply treated wastewater? Yes If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Mgd Is land application continuous or intermittent?								
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Annual average daily volume discharged to surface impoundment(s) mgd Is discharge continuous or intermittent? c. Does the treatment works land-apply treated wastewater? Yes If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Mgd Is land application continuous or intermittent?	lf y€	es, provide the following for each surface	ce impoundment:					
Is discharge continuous or intermittent? c. Does the treatment works land-apply treated wastewater? Yes If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Mgd Is land application continuous or intermittent?			, , , , , , , , , , , , , , , , , , , ,		,			
c. Does the treatment works land-apply treated wastewater? If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Is land application continuous or intermittent?	Anr	, ,	•	***************************************			mgd	
If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Is land application continuous or intermittent?	ls d	discharge continuous or	intermitte	ent?				
If yes, provide the following for each land application site: Location: Number of acres: Annual average daily volume applied to site: Is land application continuous or intermittent?	Doe	es the treatment works land-anniv treat	ed wastewater?			Yes	•	No
Number of acres: Annual average daily volume applied to site: Is land application continuous or intermittent?		,						
Number of acres: Annual average daily volume applied to site: Is land application continuous or intermittent?	•	•						
Annual average daily volume applied to site: Mgd Is land application continuous or intermittent?								
Is land application continuous or intermittent?		**************************************			Mgd			
		-		termittent?	J-			
d. Does the treatment works discharge or transport treated or untreated westewater to another	ıs k	iano application continu	ious or in	CHBREIT!				
d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? Yes								

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If transport is by	a party other than the applicant, provìde:	
Transporter nar	ne:	
Mailing Address		
Contact person		
Title:		
Telephone num	ber:	
For each treatm	ent works that receives this discharge, provide the following:	
Name:		
Mailing Address		
Contact nerson		
·		
Title:		***************************************
Title: Telephone num		
Title: Telephone num If known, provid	ber:	mg
Provide the ave	ber: e the NPDES permit number of the treatment works that receives this discharge.	mg No
Title: Telephone num If known, provide Provide the ave Does the treatn A.8.a through A	ber: e the NPDES permit number of the treatment works that receives this discharge. rage daily flow rate from the treatment works into the receiving facility. nent works discharge or dispose of its wastewater in a manner not included in	
Title: Telephone num If known, provide Provide the ave Does the treatn A.8.a through A If yes, provide t	ber: e the NPDES permit number of the treatment works that receives this discharge. rage daily flow rate from the treatment works into the receiving facility. nent works discharge or dispose of its wastewater in a manner not included in .8.d above (e.g., underground percolation, well injection)? Yes	

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WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

	scription of Outfall.					
a.	Outfall number	001	· · · · · · · · · · · · · · · · · · ·			
b.	Location	Northum				22435 (Zip Code) Virginia
		(County) 37' 58' 2	3 "	76' 3:	3' 26"	(State)
		(Latitude				(Longitude)
C.	Distance from shore (if	applicable)	n/a	ft.	
d.	Depth below surface (if	f applicable	e)	n/a	ft.	
e.	Average daily flow rate	•		.060	mgd	
f.	Does this outfall have e periodic discharge?	either an in	termittent or a	Yes	V	No (go to A.9.g.)
	if yes, provide the follo	wing inforn	nation:			
	Number of times per ye	ear dischar	ge occurs:			
	Average duration of ea	ıch dischar	ge:			
	Average flow per disch	arge:		woodayaaaaaaaaaaaaaaaa		mgd
	Months in which discha	arge occur	s;			NO. TO SECOND SE
g.	Is outfall equipped with	n a diffuser	?	Yes	V	No
10. De	scription of Receiving	Waters.				
a.	Name of receiving water	er	UTRIB Lodge Cre	ek		
b.	Name of watershed (if	known)	<u>F</u>	otomac - 1a		
	United States Soil Con	servation s	Service 14-digit water	shed code (if known):		
			_		<u> </u>	
C.	Name of State Manage	ement/Rive	er Basin (if known):	Potomac		
	United States Geologic	cal Survey	8-digit hydrologic cata	aloging unit code (if known)):	and the second of the second o
d.	Critical low flow of rece			chronic		cfs
				if applicable):	m	ng/I of CaCO ₃

Callas WW VA 009 1421

\.11. De:	scription of	Treatment.				1 1		······				
a.	What levels	of treatment a	re p rovi	ded? Ch	eck all th	nat ap	ply.					
		Primary			<u>∕</u> s	econo	dary					
		Advanced			<u>/_</u> o	ther.	Descri b e:	Disinfection	1			
b.	Indicate the	foll o wing rem	oval rate	s (as ap	plica b le)	:						
	Design BOD	removal <u>or</u> [Design C	BOD _s re	em o val			95			%	
	Design SS re	e mo val						95			%	
	Design P rea	m o val						N/A			%	
	Design N rer	m o val						90			%	
	Other										%	
c.	What type o	f disinfe c tion i	s used fo	or the eff	fluent fro	m this	s outfall? If dis	infecti o n varies	by season	plea	se describe.	
	Chlorinatio								_	-		
	If disinfection	n is by c hlorin	ati o n, is	dechl o ń	nati o n us	sed fo	or this outfall?		V	Yes		No
ď.	Does the fre	atment pla n t l	have pos	st aeratio	n?			-	~	Yes		 No
								-				
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END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM

2A YOU MUST COMPLETE

Form Approved 1/14/99 OMB Number 2040-0086

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BA	SIC	APPLICATION INFORMATION
PAR	ТВ.	ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).
All ap	oplican	ts with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).
B.1.	Inflo	w and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.
	Briefly	v explain any steps underway or planned to minimize inflow and infiltration.
B.2.	This r	graphic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show ntire area.)
	a. T	he area surrounding the treatment plant, including all unit processes.
		he major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which eated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.
	c. E	ach well where wastewater from the treatment plant is injected underground.
	d. V	vells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment vorks, and 2) listed in public record or otherwise known to the applicant.
	e. A	ny areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.
	tr	the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by uck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or isposed.
	backu _l chlorin	ss Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., lation and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily steep between treatment units. Include a brief narrative description of the diagram.
B.4.	Opera	ition/Maintenance Performed by Contractor(s).
	Are ar contra	ny operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a ctor?YesNo
		list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional if necessary).
	Name	
	Mailin	g Address:
	Telepl	none Number:
	Respo	onsibilities of Contractor:
B.5.	uncon treatm	duled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or impleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the sent works has several different implementation schedules or is planning several improvements, submit separate responses to question reach. (If none, go to question B.6.)
	a. L	ist the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.
		ndicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.
	-	YesNo

	Y NAME AND PERI						OMB Num	ber 2040-0086
С	If the answer to B.	5.b is "Yes," brie	∋).					
d.	Provide dates impo applicable. For im applicable. Indicat	provements pla	nned independen	ion for the implemencies, indicate p	nentation steps listed lanned or actual com	below, as ipletion dates, as		
			Schedule	i	Actual Completio	n		
	Implementation St	age	MM / DD /	YYYY I	MM / DD / YYYY			
	- Begin construction	on	// _					
	- End construction	1	//_					
	- Begin discharge			 -				
	- Attain operationa	al level	//_					
e.	Have appropriate p	permits/clearand	es concerning of	her Federal/Sta	ite requirements	been obtained?	Yes	No
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2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:		n Approved 1/14/99 Number 2040-0086						
BASIC APPLICATION INFORMATION								
PART C. CERTIFICATION								
All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.								
Indicate which parts of Form 2A you have completed and are subr	itting:	merchanism programmes and programmes						
X Basic Application Information packet Supplemental	pplication Information packet:							
Part D	(Expanded Effluent Testing Data)							
Part E	(Toxicity Testing: Biomonitoring Data)							
Part F	(Industrial User Discharges and RCRA/CERCLA Waste	∂S)						
Part G	(Combined Sewer Systems)	***************************************						
ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFIC	TION.							
I certify under penalty of law that this document and all attachments we designed to assure that qualified personnel properly gather and evaluar who manage the system or those persons directly responsible for gather belief, true, accurate, and complete. I am aware that there are significated imprisonment for knowing violations.	e the information submitted. Based on my inquiry of the ring the information, the information is, to the best of m	e person or persons y knowledge and						
Name and official title Kenneth D	. Eacles , County Adm	inistrator						
Signature Simple Codes)							
Telephone number 804 - 580 - 760	· (a							
Date signed 12/3/08	 							
Upon request of the permitting authority, you must submit any other inf works or identify appropriate permitting requirements.	rmation necessary to assess wastewater treatment pra	ectices at the treatment						

SEND COMPLETED FORMS TO:

Item 5. Topographic Maps

The sludge will be generated at Callao and filtered at Reedville. Therefore maps of each location are enclosed.

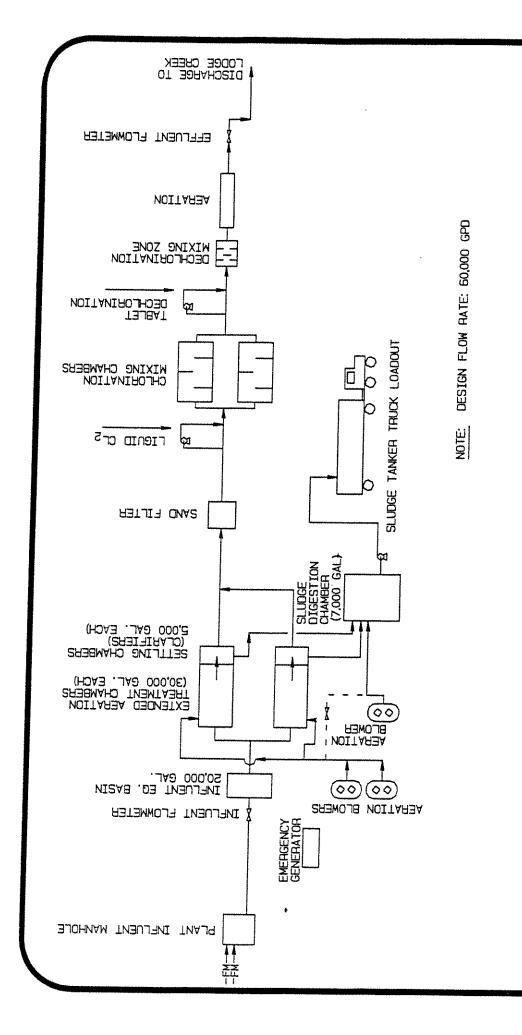
There are believed to be wells at the residences nearby the Reedville facility and one on the facility property.

At Callao, most water is supplied by private water companies. There is a well in use at the former school for that property. Other water bodies are shown on the drawings. There may be springs or seeps on the creeks downstream of the Callao discharge.

Item 6. Sludge Handling Narrative:

Sludge generated within the packaged treatment plant at Callao will be first pumped into an aerated digester chamber where it will be digested. It will then be pumped or vacuumed into tanker trucks of approximately 2,000 gallon capacity and hauled to the Reedville Wastewater Treatment Facility. At Reedville, it will be pumped directly onto filter beds, or into the digester tank at that location. The dried solids from the filter beds will be hauled to the Waste Management Landfill in Glenns, Virginia, along with the sludge from the Reedville facility. Aerobic digestion is utilized for both pathogen reduction and vector attraction reduction will be demonstrated by option 3, a bench scale demonstration.

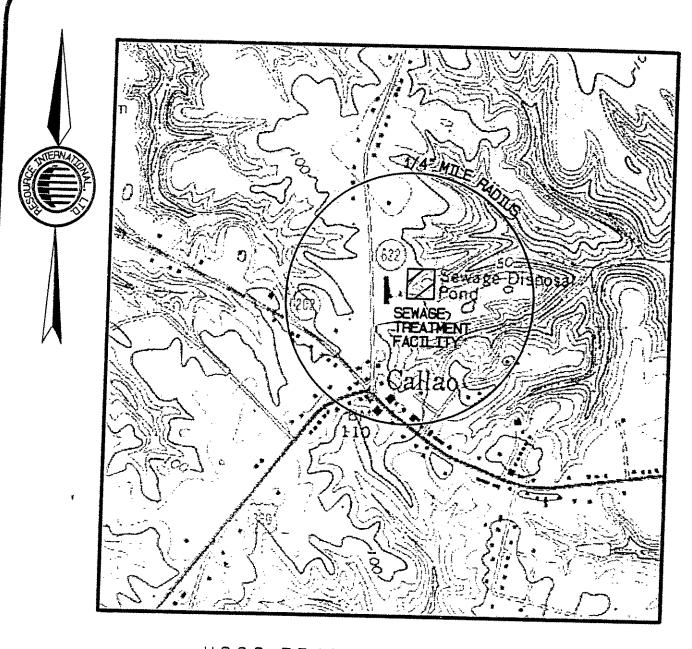
Line drawings of the Callao and Reedville Facilities are enclosed.





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OR9, 9TWW/80, 85069/:H



U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES

CALLAO, VA

SCALE: 1" - 1,000'

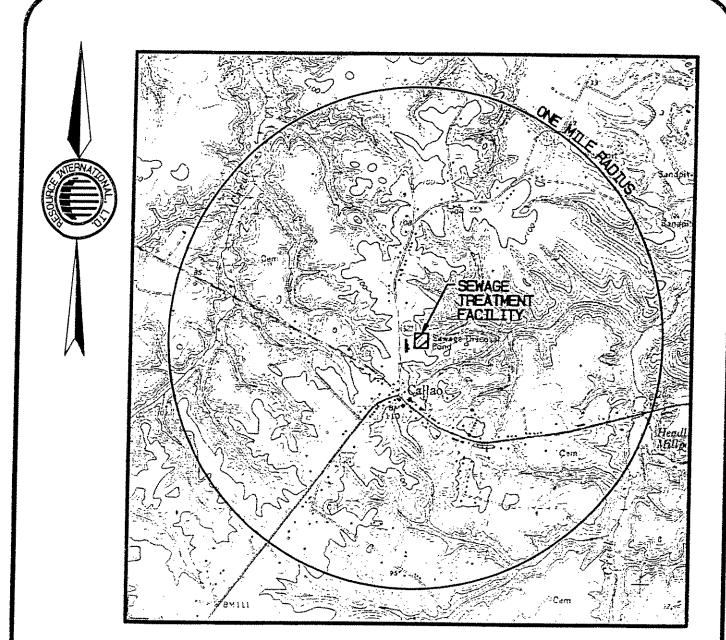
FIGURE 2
VICINITY MAP
CALLAO WWTP
NORTHUMBERLAND COUNTY
AUGUST 2003



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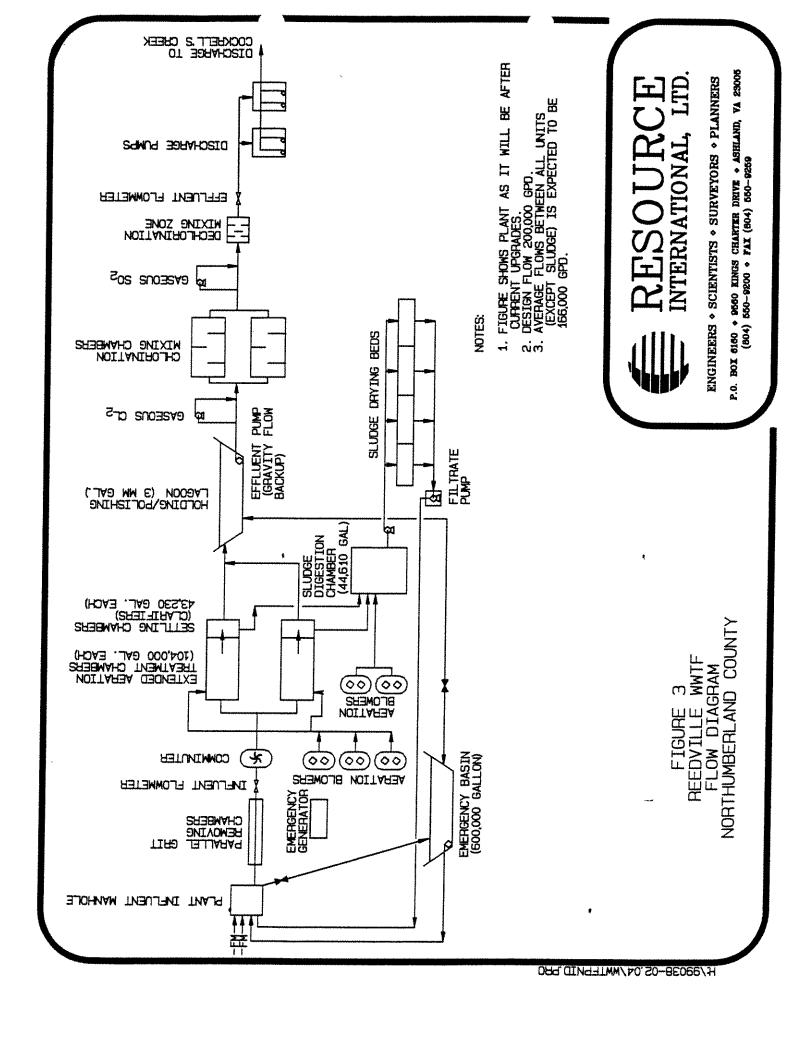
U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES
CALLAO, VA
SCALE: 1" - 2,000'

FIGURE 1
VICINITY MAP - EXTENDED
CALLAO WWTP
NORTHUMBERLAND COUNTY
AUGUST 2003

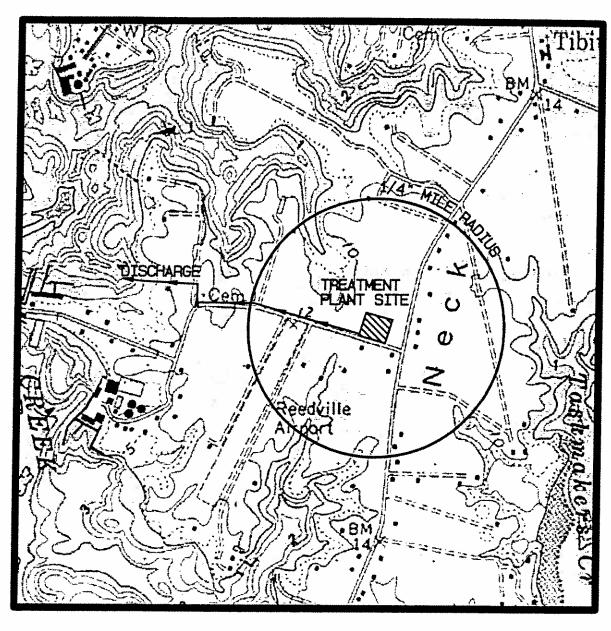


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U.S.G.S. 7.5 MINUTE SERIES QUADRANGLE REEDVILLE, VA SCALE: 1" = 1,000'

NOTES:

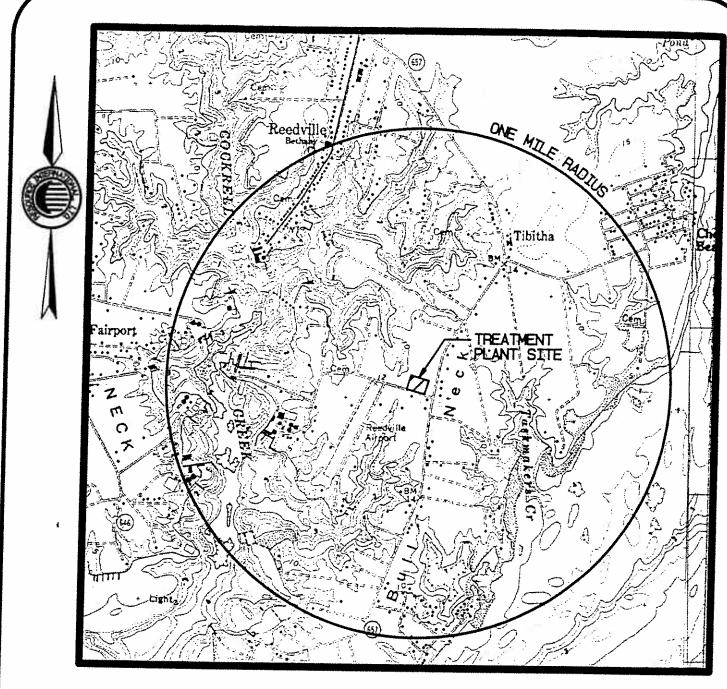
- 1. WELLS EXIST AT THE RESIDENCES WITHIN 1/4 MILE OF PLANT AS SHOWN ABOVE. ONE WELL EXISTS ON PLANT SITE.
- 2. NO SPRINGS ARE KNOWN TO EXIST.
- 3. OTHER WATER BODIES ARE SHOWN IN BLUE.

FIGURE 1
VICINITY MAP
NORTHUMBERLAND COUNTY
WASTEWATER TREATMENT FACILITY



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U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES REEDVILLE, VA. AND EAST OF REEDVILLE, VA. SCALE: 1" = 2,000'

FIGURE 2
VICINITY MAP - EXTENDED
NORTHUMBERLAND COUNTY
WASTEWATER TREATMENT FACILITY



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P.O. BOX 6180 • 9560 KINGS CHARTER DRIVE • ASHLAND, VA 23005 (804) 550-9200 • FAX (804) 550-9259

FACILITY NAME AND PERMIT NUMBER:

Callao WW VA 0091421

Form Approved 1/14/99 OMB Number 2040-0086

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

D	escription of Outfall.				
a.	Outfall number	001	******		
b.	Location	Callao			435
		(City or town, if applicable) Northumberland		Vir	Code) ginia
		-76 33' 27.31	11" 37	58' a 1	ate) 390"
		(Latitude)	· · · · · · · · · · · · · · · · · · ·		ngitude)
c.	Distance from shore	(if applicable)	n/a	ft.	
d.	Depth below surface	e (if applicable)	n/a	ft.	
e.	Average daily flow ra	ate	.060	mad	
	5 ,			9~	
f.	Does this outfall hav periodic discharge?	e either an intermittent or a			
	portouto disortargo;		Yes	<i></i>	_ No (go to A.9.g.)
	If yes, provide the fo	ollowing information:			
	Number of times per	r year discharge occurs:			
	Average duration of	each discharge:			•
	Average flow per dis	scharge:			mgd
	Months in which disc	charge occurs:			-
				V	••
g	ls outfall equipped w	/ith a diffuser?	Yes _		. No
Α.	anautustan at Dalahala	W-4			
. De	escription of Receivir	ig waters.			
a.	Name of receiving w	vater UTRIB Lodge Cre	ek		
		(if known) P	'otomac - 1a		
b.	Name of watershed	<u>.</u>	otomac - ra		
b.		onservation Service 14-digit waters			
b.	United States Soil Co	onservation Service 14-digit waters		***************************************	
b.	United States Soil Co				
	United States Soil Co	onservation Service 14-digit waters agement/River Basin (if known):	shed code (if known): <u>Potomac</u>		
	United States Soil Co	onservation Service 14-digit waters	shed code (if known): <u>Potomac</u>		
	United States Soil Consumer of State Mana United States Geolog Critical low flow of re	onservation Service 14-digit waters agement/River Basin (if known): gical Survey 8-digit hydrologic cata eceiving stream (if applicable):	shed code (if known): <u>Potomac</u> lloging unit code (if known)		
c.	United States Soil Constitution of State Mana United States Geolog Critical low flow of reacute	onservation Service 14-digit waters agement/River Basin (if known): gical Survey 8-digit hydrologic cata eceiving stream (if applicable):	shed code (if known): <u>Potomac</u> Iloging unit code (if known): chronic	cfs	

aura	0 WI	$\frac{\nu}{\nu}$	LH_	009	14	121					
A.11. Description of Tre	atment.										
a. What levels of	treatment a	re p rovi	ded? C	heck all the	at ap	ply.					
Pri	Primary Secondary										
Ad	vanced			<u> </u>	her.	Describe:	Disinfo	ection	1		
b. Indicate the fol	lowing remo	oval rate	es (as a	p p licable):							
Design BOD _s r	emoval <u>or</u> D	esign (CBOD ₆ i	removal				95	······	%	
Design SS rem	noval							95	·····	<u></u> %	
Design P remo	val							N/A		%	
Design N remo	val							90		%	
Other		***************************************						***************************************		<u></u> %	
c. What type of d	isinfection is	s used f	or the e	ffluent fror	n this	s outfall? If d	lisinfection '	varies	by season	, please describe.	
	<u> </u>	V.	lig	<u>45</u>		~~~~	······				
If disinfection k	s by chlorina	ation, is	U de c hlor	ination use	ed fo	r this outfall?	?			Yes	No No
d. Does the treatr	ment plant h	ave pos	st aerati	on?				****	<u> </u>	Yes	No
	luent testir VA 00	ng data	must b	e based o	n at				ust be no i		d by 40 CFR Part 136. d one-half years apart.
			Value		Units		Value		Units	Number of Samples	
			6.8	· · · · · · · · · · · · · · · · · · ·							
pH (Minimum)	·		7.7	······································		s.u.					
pH (Maximum) Flow Rate		······································	.0200		mg	s.u. d					
Temperature (Winter)			14		С						
Temperature (Summer)			24		С			**********			
* For pH please rep	ort a minim		**********		valu	ie					1
POLLUTANT		M	DISCH	VI DAILY ARGE		AVERA	GE DAILY	DISC	HARGE	ANALYTICAL METHOD	ML/MDL
		Co	nc.	Units		Conc.	Un	its	Number Samples		
CONVENTIONAL AND N	ONCONVE	NTION	AL COM	POUNDS							
BIOCHEMICAL OXYGEN	BO D -5	< 3		mg/l		<u>3</u>	mg/I		3	5210B	AS
DEMAND (Report one)	CBOD-5	43		mg/l		<u> </u>	mg/l		3	5210B	AS
FECAL COLIFORM		46		mg/l		2 D	mg/l		3	9221E	AS
TOTAL SUS P ENDED SOLI	DS (TSS)	41	. (ه	mg/l		41.6	mg/l		3	2540D	AS
					ENH	OE DA	DT A				

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM **2A YOU MUST COMPLETE**



Sterling Lee Bowles, III Attn: Lee Bowles P.O. Box 202 Reedville, VA 22539

Certificate of Analysis

10357 Oid Health Block Astriona virginto 23600 Prione 804 550 3975 FIX BD4 550 2328 +

Whotewater Plant

Callag Project Name :

June 20, 2007 June 20, 2007 Date Received: Oate Sampled : Time Sampled : Date issued :

10:00

June 28, 2007

Sample ID : Final	Effluent .			
Parameter	Result.	Ucits DL	Date/Time	Date/Time Apalyzed Method Analyst
BOD TKN Fecal Coliform E. Coli	₹ 2 8DL 2 2	mc/T 2 / 1 mg/T 1 1 H-N/100m7 2 H-N/100m7 2	96-20/1445 06-26/1330 06-20/1435 06-20/1430	06-25/1310 5210 B R.R 06-27/1015 4500-NH3FMDM 05-23/1235 9221E SET 05-23/1230 9221E SET
			3	

BDL = 8e1cw Detection Limit

All methods are 40 CFR 136 March 12, 2007, Table IB approved.

Reference to Standard Methods is 18th ed.

Coordinator R7673394-1

Te EO SISK



Sterling Lee Bowles, III Attn: Lee Bowles P.O. Box 202 Reedville, VA 22539

Analytical Summary

10357 Old Keelen Rogo Ashhund, Virginia 23005 Phone 804 850 3971 FOX 804 550 3826

Project Name : Callao Wastewater Plant Date Received: June 02, 2008 Date Sampled : June 02, 2008

Date Received: Date Sampled: Time Sampled

10:00

Date Issued : June 10, 2008

Lab # 1(A-D)/Sample ID	Final	Effluent		**************************************	en e	
<u>Parameter</u>	Result	Units	_DL	repared	Date/Time Analyzed	Method Analyst
CHOD TKN Fecal Coliform E. 2011 TSS	1.6 2 2 2,7	mg/1 mg/1 CFU/100m CFU/100m mg/1	2 1 2 1 2 1 0	06-03/1430 06-05/1330 06-02/1525 06-02/1530 06-03/1530	06-08/1340 06-06/1040 06-05/1325 06-04/1340 06-04/0900	5210B SET 4500-NHBF KBT 9221E SET 9221B1 SET
			V (F 0)			,

SOL = Below Detection Limit All methods are 40 GFR 136 March 12, 2007. Table IB approved. Reference to Standard Methods is 18th cd.

Carrie E. Sisk Laboratory Manager

R8678896-1



matal mir diantitional remains

Sterling Lee Bowles, III Attn: Lee Bowles .0. Box 202 eedville, VA 22539

ARRIYEICAL Surnary

19367 Old Keeton Pank Ambienst, Virginia 20005 Phone 604 850 397! 744 BC4 \$50 3826

Projec: Name Callag Wastewater Plant Date Raceived: June 23, 2008 Date Sampled: June 23, 2008 Date Sampled: June 23, 2008 Time Sampled: 10:00 Date Issued: June 30, 2008

iab # 1(A-D-/Sample ID - Final Efficent -

Farameter BOD	Result	Anits	Di	Date/Time. Prepared	- Date/Time - Analyzed	Method Amalyst
:BOD !KN [Heal Coliform	< 7 B0L € 2	#g/1 #g/1 CFL/100m1	.12	06-24/1400 06-24/0900	06-29/1240 06-25/1000	52108 SET 4500-NH3F: KET
E. Coli	2	ATEXADOM	1	06-23/1500 06-23/1500	06-26/1355 06-25/1420	

BUI = Below Detection limit. All dethods are 40 CFR 136 March 12, 2007, Table 13 approved. Reference to Standard Methods is 18th cd.

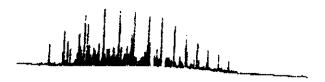
Carrio E. Sisk

Laboratory Manager

RE679237-1

Primary Laboratories, Inc.

7423 Lee Davis Road • Mechanicsville, VA 23111 • Tele hone (804) 559-9004 • Pax (804) 559-9306



ANALYTICAL LABORATORY REPORT

Calleo Treatment Plant Atin: Lee Bawles 104 Harryhogan Road Calleo, VA 22435

Date Received:

2-Sep-06

Date Sampled:

2-Sep-06

Work Order No.

Client ID:	Finel Effluent	Composite					
Description	Final Result	Reporting Limit	Units of Vieasure	Method Numbers*	Date Analyzed	Time Analyzed	Tech Inklais
BOD	<5.0	5.0	rag/L	5210 B	4-Sep-08	7:50	NA:
TKN	0.8	0.5	mg/L	4500 N/NH ₃	9-Sep-08	13:30	NA!
TSS	<1.0	1.0	nng/L	2540 D	5-Sep-05	11:30	AS
Fecal Coliform	<2	2	IAPNU100ml	9221E	2-Sep-08	14:00	AS
E Coll	<\$	2	IAPPU100mi	9221F	2-56p-06	14:00	AS

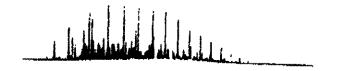
[&]quot;All methods are from Standard Methods 18th Edition, unless otherwise noted.

Laboratory Manager

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Primary Laboratories, Inc.

7423 Lec Davis Road • Mechanicsville, VA 23111 • Telephone (804) 559-9004 • Fax (804) 559-9306



ANALYTICAL LABORATORY REPORT

22-Sep-08

Callan Treatment Plant Attn: Lee Bowles 104 Harryhogan Road Callao, VA 22435

Date Received:

15-Sep-08

Date Sampled:

15-Sep-08 0809109-01

Work Order No: Client ID:

Test Description	Pinal Pinal Result	Reporting Limit	Units of	Method Numbers*	Date Analyzed	Time Analyzed	Tech.
CBOD	<5.0	5.0	nø/L	5210 B	17-9-p-08	7:30	NA
TKN	<0.5	0.5	rr g/] ,	4500 N/NH ₃	18-Sep-08	8:00	NA
TSS	<1.0	10	mg/L	2540 D	16-Sep-08	12:00	A\$
Pecal Coliform	≺2	2	NPN/100mi	9221E	15-Sep-08	14:00	AS
E Coli	<2	2	NPN/100mi	9221F	15-Sep-08	14:00	AS

[&]quot;All methods are from Standard Methods 18th Edi ion, unless otherwise noted.

Laboratory Manager

Date: 9/20/08

Those analytical results are based upon materials provided by the allent i.m. are intended for the exclusive can of the client. Those intelytical results represent the best judgement of Primary Laboratories, I to Primary Laboratories. Sec. settermes no responsibility, regress or implied, as to the interpresident of the analytical results contains in this teport. The report is not to be reproduced exampl with the written approval of Primary Laboratories, inc.



Sterling Lee Bowles, III Attn: Lee Bowles P.O. Box 202 Reedville, VA 22539

Certificate of Analysis

10351 Old Region Food Ashtona, Virginia 20005. Phone 804 550 3971 Fax 904 650 3826

Project Name Date Received Callao Wastewater Plant June 06. 2007 June 05. 2007

Date Sampled : Time Sampled : Date Issued :

10:00

June 20 2007

Lab # 1/Sample 10		and the second s	
<u>Parameter</u>	KAKUIT URTER OF DES	e/Time: Date/Time Poaced ::Amalyzed Method Adalysi	t
CBOD TXN TSS	60k (11/) 1 06-1	66/1500 06-11/1415 52108 R.R 12/1000 06-12/1415 4500-NH38MDM 11/0915 06-12/0830 2540 D ISW	
Lab # 2/Sample ID	: Final Effluent		
Parameter	Result willing Giber Pre	a/Time Date/Time =pared Analyzed Mathod Analyst	t.
Fecal Coliform E Coli	MP 1COm 2 06-0	06/1445 06-08/1350 9221E SET 06/1445 06-08/1355 9221E SET	*

BDL = Below Detection Limit All methods are 40 (FR 136 March 12, 2017, Table IB approved. Reference to Standard Methods is 18th ei.

Carrie E. Sisk QA Coordinator

R7673113-1

FACILITY NAME AND PERMIT NUMBER:

Callao WW VA 009 14 21

Form Approved 1/14/99 OMB Number 2040-0086

BA	SI	C APPLICATION INFORMATION	
PAR	T	. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).	
All a	pli	ants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).	
B.1.	lr	low and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.	
	Bı	efly explain any steps underway or planned to minimize inflow and infiltration.	
B.2.	T	pographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundar is map must show the outline of the facility and the following information. (You may submit more than one map if one map does not she entire area.)	
	a.	The area surrounding the treatment plant, including all unit processes.	
	b.	The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through w treated wastewater is discharged from the treatment plant. Include outfalls from bypass plping, if applicable.	/hi c h
	C.	Each well where wastewater from the treatment plant is injected underground.	:
	d.	Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treat works, and 2) listed in public record or otherwise known to the applicant.	ment
	e.	Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.	
	f.	If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, a disposed.	
	ba chl	cess Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and kup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., rination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate rates between treatment units. Include a brief narrative description of the diagram.	
B.4.	Οp	eration/Maintenance Performed by Contractor(s).	
		any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility tractor?YesNo	y of a
		es, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach addities if necessary).	onal
	Na	Je:	
	Ма	ing Address:	
	Te	phone Number:	
	Re	ponsibilities of Contractor:	
	une tre	eduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or ompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. It then the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question each. (If none, go to question B.6.)	If the lion
	a.	List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.	
	b.	Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.	:
		YesNo	

FACILITY NAME AND PERMIT NUMBER:								roved 1/14/99 ber 2040-0086
c	If the answer to B.5	5.b is "Yes," brie	fly describe, incl	uding new maximu	m daily inflow	rate (if applicable	e).	
d.		provements plan	ned independen	tly of local, State, o			nentation steps listed lanned or actual com	
			Schedule	Acti	ual Completio	n		
	Implementation Sta	age	MM / DD /	YYYY MM	/DD/YYYY			
	- Begin construction	n			//			
	- End construction				//			
	- Begln discharge			······································	//			
	- Attain operationa	l level			//			
e.	Have appropriate p						Yes	_No
tes ove me stal poll	ting required by the erflows in this section thods. In addition, t	permitting authon. All information his data must connalytes not adding the no more the more than	rity <u>for each out</u> n reported must omply with QA/Q ressed by 40 CF	all through which e be based on data of C requirements of R Part 136. At a n -half years old.	effluent is disc collected thro 40 CFR Part	charged. Do not i ugh analysis cond 136 and other ap ent testing data r	ters. Provide the indi nclude information or ducted using 40 CFR propriate QA/QC requ nust be based on at le	n combined sewer Part 136 uirements for
·		DISCI	ARGE				ANIALVTICAL	141 / 14D)
		Conc.	Units	Conc.	Units	Number of Samples	ANALYTICAL METHOD	ML / MDL
CONVEN	TIONAL AND NON	I CONVENTIONA	L COMPOUNDS	<u> </u>				·····
AMMONIA	(as N)			T				
CHLORIN RESIDUA	E (TOTAL L, TRC)							
DISSOLV	ED OXYGEN							
TOTAL K.					······································			
NITROGE NITRATE	N (TKN) PLUS NITRITE							
NITROGE OIL and G								
	ORUS (Total)							
					 	_		
SOLIDS (SSOLVED TDS)						***************************************	
OTHER	······································							
REFE	R TO THE A	PPLICATION	ON OVERV	END OF PA IEW TO DE OU MUST C	TERMIN		THER PARTS	S OF FORM

FACILITY NAME AND PERMIT NUMBER:	Form Approved 1/14/99 OMB Number 2040-0086							
BASIC APPLICATION INFORMATION								
PART C. CERTIFICATION								
All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.								
Indicate which parts of Form 2A you have completed and are submitting:								
X Basic Application Information packet Supplemental Application	Information packet:							
	f Effluent Testing Data)							
Part E (Toxicity T	esting: Biomonitoring Data)							
Part F (Industrial	User Discharges and RCRA/CERCLA Wastes)							
Part G (Combined	d Sewer Systems)							
ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.								
I certify under penalty of law that this document and all attachments were prepared designed to assure that qualified personnel properly gather and evaluate the inform who manage the system or those persons directly responsible for gathering the infibelief, true, accurate, and complete. I am aware that there are significant penalties and imprisonment for knowing violations.	nation submitted. Based on my inquiry of the person or persons formation, the information is, to the best of my knowledge and							
Name and official title Signature Signature Name and official title Signature	des, County Administrator							
Date signed 12/3/08								
Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.								

SEND COMPLETED FORMS TO:

Item 5. Topographic Maps

The sludge will be generated at Callao and filtered at Reedville. Therefore maps of each location are enclosed.

There are believed to be wells at the residences nearby the Reedville facility and one on the facility property.

At Callao, most water is supplied by private water companies. There is a well in use at the former school for that property. Other water bodies are shown on the drawings. There may be springs or seeps on the creeks downstream of the Callao discharge.

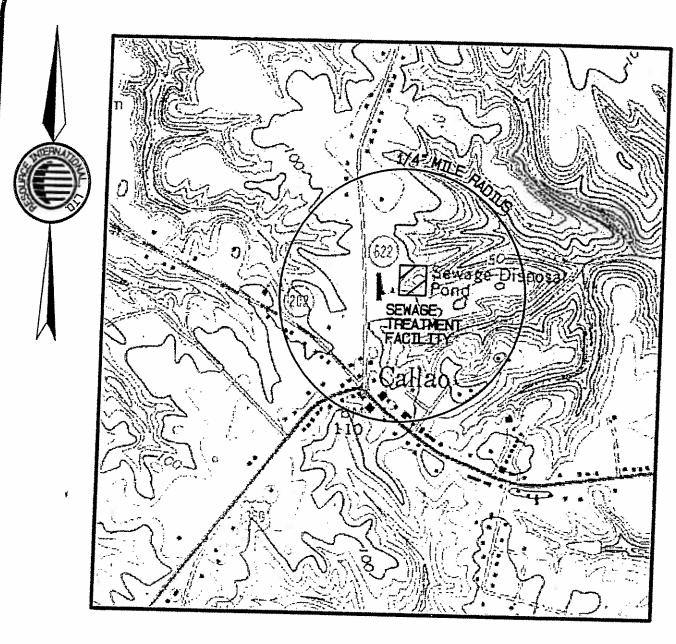
Item 6. Sludge Handling Narrative:

Sludge generated within the packaged treatment plant at Callao will be first pumped into an aerated digester chamber where it will be digested. It will then be pumped or vacuumed into tanker trucks of approximately 2,000 gallon capacity and hauled to the Reedville Wastewater Treatment Facility. At Reedville, it will be pumped directly onto filter beds, or into the digester tank at that location. The dried solids from the filter beds will be hauled to the Waste Management Landfill in Glenns, Virginia, along with the sludge from the Reedville facility. Aerobic digestion is utilized for both pathogen reduction and vector attraction reduction will be demonstrated by option 3, a bench scale demonstration.

Line drawings of the Callao and Reedville Facilities are enclosed.

RESOURC]

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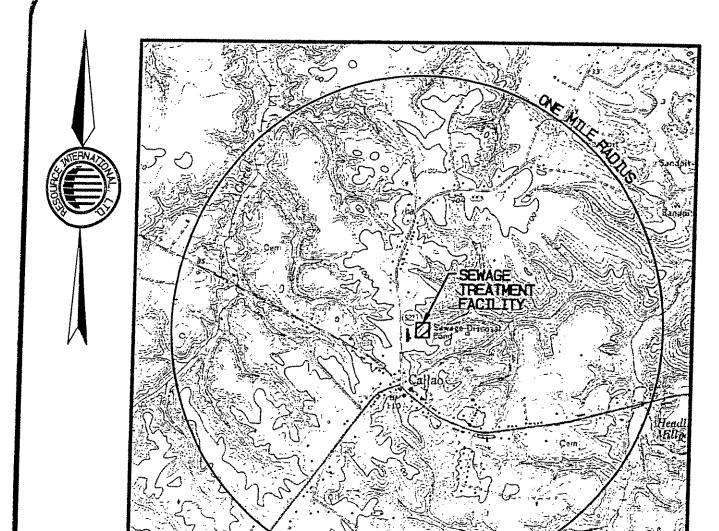
U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES
CALLAO, VA
SCALE: 1" - 1,000'

FIGURE 2
VICINITY MAP
CALLAO WWTP
NORTHUMBERLAND COUNTY
AUGUST 2003



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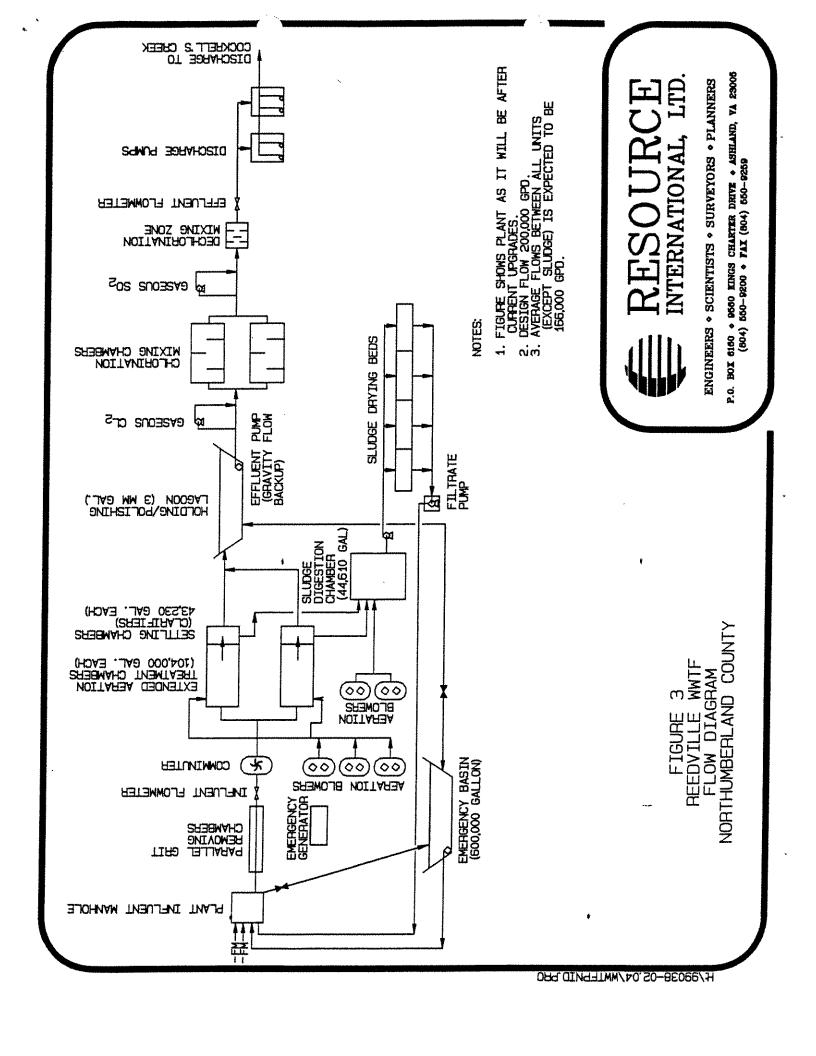
U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES CALLAO, VA SCALE: 1" - 2,000'

FIGURE 1
VICINITY MAP — EXTENDED
CALLAO WWTP
NORTHUMBERLAND COUNTY
AUGUST 2003

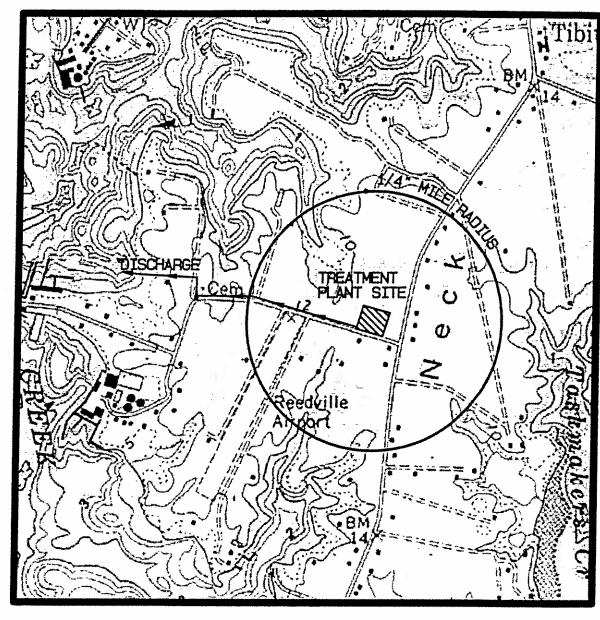


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U.S.G.S. 7.5 MINUTE SERIES QUADRANGLE REEDVILLE, VA SCALE: 1" = 1,000'

NOTES:

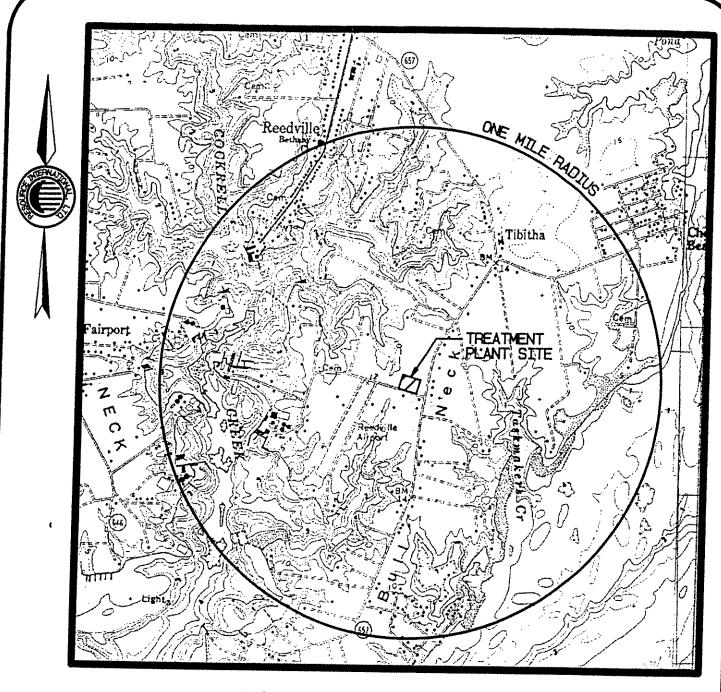
- 1. WELLS EXIST AT THE RESIDENCES WITHIN 1/4 MILE OF PLANT AS SHOWN ABOVE. ONE WELL EXISTS ON PLANT SITE.
- 2. NO SPRINGS ARE KNOWN TO EXIST.
- 3. OTHER WATER BODIES ARE SHOWN IN BLUE.

FIGURE 1
VICINITY MAP
NORTHUMBERLAND COUNTY
WASTEWATER TREATMENT FACILITY



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U.S.G.S. 7.5 MINUTE SERIES QUADRANGLES REEDVILLE, VA. AND EAST OF REEDVILLE, VA. SCALE: 1" = 2,000'

FIGURE 2
VICINITY MAP - EXTENDED
NORTHUMBERLAND COUNTY
WASTEWATER TREATMENT FACILITY



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Mosca, Denise

From: Palmore, Jennifer

Sent: Friday, March 27, 2009 11:13 AM

To: Mosca, Denise

Subject: Lat-long

You sent me the DEQ lat-long, and their map, but not the lat-long that they submitted. Could you please send that? The map is very, very close to what I have had for them. The lat-long in CEDS is pretty far off and I am not sure where that came from. Based on the map it is approximately 37 58 21, -76 33 27, but would like to see what they had if you could. Thanks.

Thanks.

Jennifer V. Palmore, P.G. Senior Environmental Engineer Dept. of Environmental Quality Piedmont Regional Office 49-49- A Cox Road Glen Allen, VA 23060 (804) 527-5058 (804) 527-5106 (fax)

